

SPATIAL CHARACTERISTICS OF OBSERVED PRECIPITATION FIELDS: A CATALOG OF SUMMER STORMS IN ARIZONA

VOLUME II

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by

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RALPH M. PARSONS LABORATORY

HYDROLOGY AND WATER RESOURCE SYSTEMS

Report Number 307

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MIT

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SCHOOL OF ENGINEERING

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

Cambridge, Massachusetts 02139

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SPATIAL CHARACTERISTICS OF OBSERVED PRECIPITATION FIELDS:
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MARCH 1986

PREFACE

This report is one of four in a sequence describing and evaluating the modeling of the total storm rainfall due to stationary events. These reports are

- Report No. 305 "Spatial Poisson Models of Stationary Storm Rainfall: Theoretical Development" by I. Rodriguez-Iturbe, Q. Wang, P. S. Eagleson, and B. L. Jacobs.
- Report No. 306 "Spatial Analysis of Storm Depths from an Arizona Raingage Network" by N. Fennessey, P. S. Eagleson, Q. Wang, and I. Rodriguez-Iturbe.
- Report No. 307 (Vols. 1 and 2) "Spatial Characteristics of Observed Precipitation Fields: A Catalog of Summer Storms in Arizona" by N. Fennessey, P. S. Eagleson, Q. Wang, and I. Rodriguez-Iturbe.
- Report No. 308 "Spatial Poisson Models of Stationary Storm Rainfall: Parameterization, Evaluation and Numerical Simulation" by Q. Wang, N. Fennessey, P. S. Eagleson, and I. Rodriguez-Iturbe.

They are all available from

Director
Ralph M. Parsons Laboratory
Room 48-311
Massachusetts Institute of Technology
Cambridge, Massachusetts 02139

The raw data were provided by the Agricultural Research Service (U.S. Department of Agriculture), and are available from their data center in Beltsville, Maryland.

Data tables for the 428 identified storms are available on computer tape from the above MIT address along with a computer program for retrieving the data for a particular storm.

Abstract

Eight years of summer raingage observations are analyzed for a dense, 93 gage, network operated by the U.S. Department of Agriculture, Agricultural Research Service, in the 150 km² Walnut Gulch catchment near Tucson, Arizona. Storms are defined by the total depths collected at each raingage during the noon-to-noon period for which there was depth recorded at any of the gages. For each of the resulting 428 storms, the 93 gage depths are interpolated onto a dense grid and the resulting random field is analyzed. Presented are: storm depth isohyets at 2 mm contour intervals, first three moments of point storm depth, spatial correlation function, spatial variance function, and the spatial distribution of total rainstorm depth.

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Acknowledgements

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The work was performed by Mr. Neil M. Fennessey, Research Assistant in Civil Engineering, and this document is a part of his thesis submitted to the Massachusetts Institute of Technology in partial fulfillment of the requirements for the degree of Master of Science in Civil Engineering. The work was supervised by Dr. Peter S. Eagleson, Edmund K. Turner Professor of Civil Engineering. Mr. Wang Qinliang, Visiting Engineer, provided continuing assistance while on leave from the Yangtze Valley Planning Office, Ministry of Water Resources and Electric Power, People's Republic of China. Dr. Ignacio Rodriguez-Iturbe, Graduate Program in Hydrology and Water Resources, Universidad Simon Bolivar, Caracas, Venezuela, provided guidance on a consulting basis.

Special thanks are extended to Dr. David Woolhizer^A and Ms. Fatima Lopez of the U.S.D.A. Southwest Rangeland Watershed Research Center in Tucson, Arizona for generously providing the data used in this study. Further thanks are due the operators at the M.I.T. Information Processing Services for their extraordinary diligence and patience in successfully executing and carefully reviewing several hundred computer-generated plots.

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INDEX OF STORM DAYS

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
June 13, 1974	1	0.009	1	0.948	1
June 24, 1974	2	0.214	3	0.634	3
June 25, 1974	3	0.465	5	0.484	5
June 26, 1974	4	3.877	11	0.011	7
June 27, 1974	5	0.013	1	0.945	9
July 1, 1974	6	0.027	2	0.936	11
July 2, 1974	7	6.290	29	0.037	13
July 3, 1974	8	6.672	44	0.111	15
July 5, 1974	9	0.004	1	0.957	17
July 6, 1974	10	0.359	4	0.514	19
July 7, 1974	11	10.464	30	0.000	21
July 9, 1974	12	0.001	1	0.992	23
July 13, 1974	13	8.381	35	0.005	25
July 14, 1974	14	8.246	24	0.000	27
July 15, 1974	15	1.673	29	0.158	29
July 16, 1974	16	5.585	17	0.009	31
July 17, 1974	17	0.819	8	0.503	33
July 18, 1974	18	10.433	21	0.001	35
July 19, 1974	19	11.782	31	0.001	37
July 20, 1974	20	1.439	10	0.042	39
July 21, 1974	21	0.187	7	0.772	41
July 23, 1974	22	0.033	2	0.879	43
July 26, 1974	23	2.397	36	0.049	45

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
July 27, 1974	24	3.507	18	0.171	47
July 28, 1974	25	22.431	50	0.000	49
July 29, 1974	26	2.463	13	0.150	51
July 31, 1974	27	0.100	3	0.911	53
Aug 1, 1974	28	14.666	51	0.000	55
Aug 2, 1974	29	4.456	24	0.001	57
Aug 3, 1974	30	1.243	11	0.603	59
Aug 4, 1974	31	4.389	34	0.003	61
Aug 5, 1974	32	10.173	66	0.365	63
Aug 9, 1974	33	0.018	1	0.943	65
Aug 13, 1974	34	7.859	40	0.007	67
Aug 14, 1974	35	8.182	36	0.085	69
Aug 15, 1974	36	0.594	54	0.715	71
Aug 18, 1974	37	9.353	51	0.003	73
Aug 19, 1974	38	5.409	33	0.078	75
Aug 22, 1974	39	2.139	25	0.335	77
Aug 23, 1974	40	0.012	1	0.909	79
Aug 24, 1974	41	0.844	5	0.244	81
Aug 25, 1974	42	0.207	3	0.599	83
Sept 1, 1974	43	0.075	7	0.828	85
Sept 2, 1974	44	13.582	43	0.003	87
Sept 3, 1974	45	2.915	18	0.217	89
Sept 4, 1974	46	0.540	9	0.619	91
Sept 5, 1974	47	0.072	7	0.926	93
Sept 6, 1974	48	3.828	38	0.426	95

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
Sept 9, 1974	49	0.441	6	0.718	97
Sept 12, 1974	50	4.212	20	0.070	99
Sept 14, 1974	51	1.057	10	0.291	101
Sept 15, 1974	52	0.017	1	0.918	103
Sept 16, 1974	53	0.036	1	0.780	105
Sept 18, 1974	54	1.858	38	0.363	107
Sept 19, 1974	55	0.995	5	0.220	109
Sept 20, 1974	56	1.871	11	0.065	111
Sept 21, 1974	57	0.264	3	0.563	113
Sept 22, 1974	58	1.604	6	0.028	115
Sept 24, 1974	59	12.851	36	0.001	117
Sept 25, 1974	60	0.314	8	0.695	119
Sept 26, 1974	61	0.088	1	0.547	121
Sept 27, 1974	62	0.004	1	0.963	123
June 6, 1975	1	0.090	1	0.535	125
July 1, 1975	2	3.306	16	0.061	127
July 2, 1975	3	0.287	5	0.611	129
July 3, 1975	4	0.683	7	0.270	131
July 4, 1975	5	0.168	5	0.629	133
July 5, 1975	6	11.213	32	0.000	135
July 6, 1975	7	0.008	1	0.921	137
July 7, 1975	8	9.220	23	0.000	139
July 8, 1975	9	2.631	16	0.276	141
July 10, 1975	10	0.666	13	0.495	143
July 11, 1975	11	1.597	12	0.010	145

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
July 12, 1975	12	13.577	53	0.013	147
July 17, 1975	13	23.926	75	0.032	149
July 18, 1975	14	2.205	21	0.345	151
July 19, 1975	15	0.706	5	0.311	153
July 20, 1975	16	0.219	3	0.542	155
July 21, 1975	17	9.960	41	0.000	157
July 22, 1975	18	13.452	51	0.000	159
July 23, 1975	19	8.849	33	0.000	161
July 24, 1975	20	5.522	16	0.000	163
July 25, 1975	21	0.135	3	0.720	165
July 26, 1975	22	0.206	4	0.614	167
July 27, 1975	23	0.511	5	0.506	169
July 28, 1975	24	2.219	63	0.345	171
July 29, 1975	25	1.305	10	0.247	173
July 30, 1975	26	0.032	2	0.901	175
Aug 8, 1975	27	2.734	8	0.011	177
Aug 9, 1975	28	0.487	9	0.481	179
Aug 10, 1975	29	0.897	8	0.343	181
Aug 11, 1975	30	1.326	4	0.042	183
Aug 12, 1975	31	0.529	6	0.508	185
Aug 13, 1975	32	0.119	3	0.810	187
Aug 18, 1975	33	0.017	2	0.932	189
Aug 19, 1975	34	0.794	3	0.021	191
Aug 22, 1975	35	5.665	43	0.091	193
Aug 23, 1975	36	5.399	22	0.036	195

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
Sept 1, 1975	37	3.344	20	0.254	197
Sept 2, 1975	38	0.717	9	0.413	199
Sept 3, 1975	39	9.955	73	0.042	201
Sept 4, 1975	40	1.674	9	0.143	203
Sept 5, 1975	41	14.947	53	0.000	205
Sept 6, 1975	42	0.845	3	0.067	207
Sept 7, 1975	43	10.665	29	0.001	209
Sept 8, 1975	44	2.922	16	0.451	211
Sept 11, 1975	45	0.192	4	0.788	213
Sept 12, 1975	46	1.811	19	0.071	215
Sept 13, 1975	47	19.634	37	0.000	217
Sept 30, 1975	48	0.025	1	0.826	219
June 28, 1976	1	2.413	12	0.038	221
June 29, 1976	2	1.216	8	0.063	223
June 30, 1976	3	1.541	12	0.351	225
July 1, 1976	4	0.056	2	0.877	227
July 3, 1976	5	1.236	17	0.613	229
July 5, 1976	6	0.779	11	0.529	231
July 10, 1976	7	2.018	7	0.043	233
July 11, 1976	8	10.584	44	0.002	235
July 12, 1976	9	6.179	38	0.027	237
July 14, 1976	10	0.168	3	0.473	239
July 15, 1976	11	6.229	14	0.000	241
July 16, 1976	12	1.544	9	0.388	243
July 17, 1976	13	0.655	3	0.127	245

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
July 18, 1976	14	6.293	28	0.048	247
July 19, 1976	15	5.503	21	0.007	249
July 20, 1976	16	5.340	23	0.033	251
July 21, 1976	17	0.963	5	0.104	253
July 22, 1976	18	0.574	11	0.655	255
July 23, 1976	19	4.129	11	0.026	257
July 24, 1976	20	1.172	19	0.280	259
July 25, 1976	21	0.386	3	0.320	261
July 26, 1976	22	6.422	28	0.002	263
July 27, 1976	23	19.132	50	0.006	265
July 28, 1976	24	15.957	195	0.000	267
July 29, 1976	25	0.878	36	0.453	269
July 30, 1976	26	0.313	5	0.479	271
Aug 7, 1976	27	0.060	2	0.857	273
Aug 8, 1976	28	1.353	4	0.002	275
Aug 9, 1976	29	0.043	2	0.926	277
Aug 10, 1976	30	9.947	48	0.045	279
Aug 12, 1976	31	3.552	16	0.143	281
Aug 16, 1976	32	2.304	5	0.000	283
Aug 17, 1976	33	5.007	29	0.055	285
Aug 18, 1976	34	0.179	9	0.780	287
Aug 19, 1976	35	2.776	7	0.021	289
Aug 21, 1976	36	0.013	2	0.970	291
Aug 22, 1976	37	7.481	76	0.019	293
Aug 23, 1976	38	0.065	2	0.817	295

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
Aug 24, 1976	39	0.243	6	0.702	297
Aug 25, 1976	40	0.179	2	0.629	299
Aug 26, 1976	41	1.726	18	0.539	301
Aug 27, 1976	42	2.055	9	0.023	303
Aug 31, 1976	43	0.789	4	0.094	305
Sept 1, 1976	44	1.253	7	0.063	307
Sept 4, 1976	45	8.629	20	0.000	309
Sept 5, 1976	46	16.489	49	0.000	311
Sept 6, 1976	47	15.068	48	0.030	313
Sept 8, 1976	48	1.518	6	0.162	315
Sept 10, 1976	49	8.179	18	0.015	317
Sept 23, 1976	50	0.615	6	0.305	319
Sept 24, 1976	51	6.990	13	0.000	321
Sept 25, 1976	52	0.465	4	0.534	323
Sept 26, 1976	53	0.046	3	0.913	325
June 3, 1977	1	0.406	6	0.764	327
June 4, 1977	2	1.874	6	0.112	329
June 7, 1977	3	0.436	5	0.335	331
June 8, 1977	4	1.809	11	0.102	333
June 21, 1977	5	1.383	12	0.213	335
June 22, 1977	6	5.952	26	0.011	337
July 1, 1977	7	1.012	5	0.060	339
July 2, 1977	8	0.510	3	0.145	341
July 3, 1977	9	17.294	41	0.010	343
July 4, 1977	10	0.307	7	0.757	345

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
July 5, 1977	11	1.631	24	0.332	347
July 8, 1977	12	0.006	1	0.946	349
July 9, 1977	13	0.232	4	0.584	351
July 10, 1977	14	0.197	2	0.415	353
July 11, 1977	15	1.294	13	0.406	355
July 12, 1977	16	0.290	14	0.792	357
July 13, 1977	17	2.902	15	0.213	359
July 14, 1977	18	1.172	5	0.011	361
July 16, 1977	19	0.014	1	0.941	363
July 17, 1977	20	0.027	3	0.947	365
July 18, 1977	21	0.302	2	0.403	367
July 19, 1977	22	1.733	17	0.258	369
July 20, 1977	23	0.054	2	0.815	371
July 21, 1977	24	2.245	9	0.041	373
July 22, 1977	25	12.713	34	0.000	375
July 23, 1977	26	5.068	11	0.000	377
July 24, 1977	27	0.003	1	0.971	379
July 25, 1977	28	1.176	29	0.526	381
July 27, 1977	29	0.065	3	0.855	383
July 28, 1977	30	0.837	8	0.325	385
July 30, 1977	31	0.498	9	0.574	387
July 31, 1977	32	8.881	31	0.009	389
Aug 1, 1977	33	8.409	92	0.000	391
Aug 6, 1977	34	2.587	16	0.001	393
Aug 8, 1977	35	0.617	8	0.360	395

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
Aug 9, 1977	36	0.389	26	0.606	397
Aug 10, 1977	37	0.080	1	0.565	399
Aug 11, 1977	38	5.039	31	0.005	401
Aug 12, 1977	39	0.477	7	0.697	403
Aug 13, 1977	40	4.176	52	0.199	405
Aug 14, 1977	41	3.295	12	0.000	407
Aug 15, 1977	42	29.362	61	0.000	409
Aug 16, 1977	43	0.480	27	0.403	411
Aug 17, 1977	44	0.010	1	0.943	413
Aug 18, 1977	45	1.267	8	0.167	415
Aug 19, 1977	46	0.077	2	0.860	417
Aug 20, 1977	47	5.494	15	0.000	419
Aug 21, 1977	48	0.006	1	0.952	421
Aug 22, 1977	49	0.086	3	0.791	423
Aug 23, 1977	50	1.866	24	0.091	425
Aug 24, 1977	51	0.780	6	0.250	427
Aug 31, 1977	52	2.130	15	0.067	429
Sept 1, 1977	53	28.868	59	0.000	431
Sept 2, 1977	54	2.771	35	0.451	433
Sept 4, 1977	55	2.148	12	0.057	435
Sept 5, 1977	56	11.748	29	0.000	437
Sept 10, 1977	57	0.039	2	0.834	439
Sept 11, 1977	58	10.810	31	0.000	441
Sept 12, 1977	59	0.045	1	0.792	443
Sept 22, 1977	60	2.303	13	0.005	445

Storm Date	Storm Number	Average Point Depth (mm)	Maximum Storm Depth (mm)	Fraction of Dry Area	Page
Sept 25, 1977	61	0.276	4	0.630	447
Sept 26, 1977	62	31.468	92	0.000	449
Sept 27, 1977	63	3.947	26	0.012	451

INTRODUCTION

This work is part of a larger study of the spatial characteristics of storm precipitation which is designed to improve the way in which the spatial variability of storms is handled in hydrologic computation. This, the first phase of the work, deals with the simplest case, rainstorms that are essentially stationary in space.

The storms are modeled conceptually as an agglomeration of rain-producing cells distributed randomly in two dimensions. The theoretical analysis of the resulting random field is presented in the first of the four reports in this series (No. 305).

The parameters of the conceptual model are evaluated from the analysis of eight years of summer rainstorm data collected by the Agricultural Research Service (U.S. Department of Agriculture) at a dense rain-gage network in their Walnut Gulch experimental catchment near Tucson, Arizona. The occurrence of measurable rain at any one of the catchment's 93 gages during a noon-to-noon day defines a "storm day". The total rainfall at each of the gages during a storm day constitutes the data set for a single storm. The data are interpolated onto a fine grid and analyzed to obtain: an isohyetal plot at 2 mm intervals, the first three moments of point storm depth, the spatial correlation function, the spatial variance function, and the spatial distribution of the total storm depth. The description of the data analysis and the computer programs necessary to read the associated data tapes are presented in the second report (No. 306).

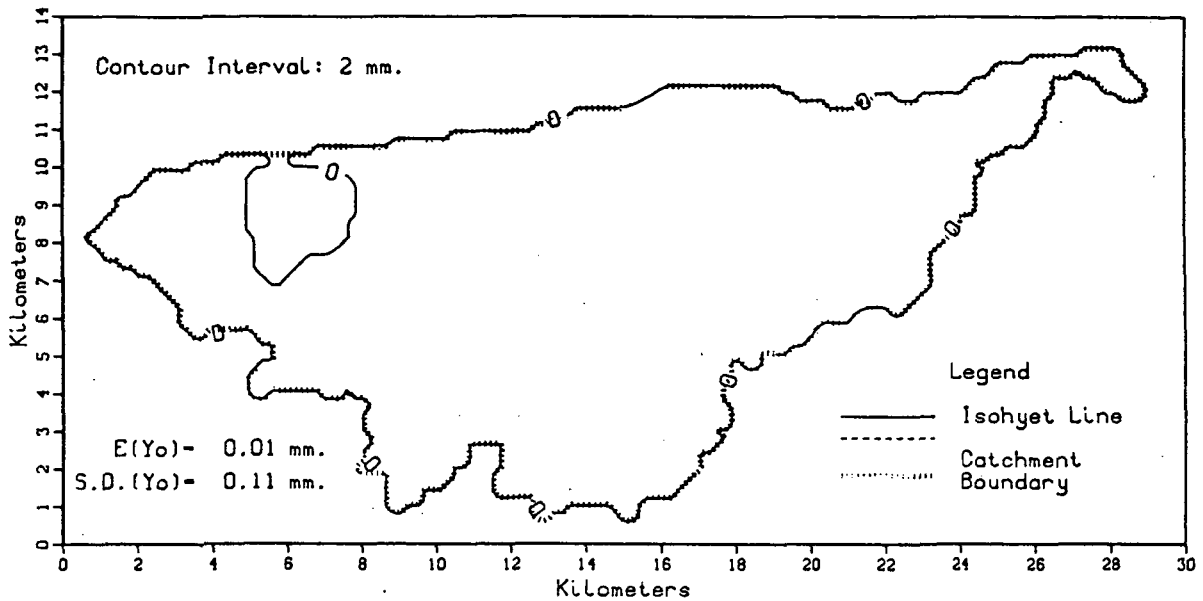
The two volumes of this, the third report, contain the results of the data analysis for the 428 storms identified during the eight data

years available. Each storm is described on a single sheet (both sides). The front of the sheet contains the isohyetal plot in the lower left hand corner of which are the mean and standard deviation of the observed raingage depths. Below this are plots of the spatial correlation and variance functions. On the reverse side is a data table which presents: the calculated values of the moments of the interpolated grid-point depths, the fraction of the basin which is wetted, the fraction of the basin which remains dry, the spatial correlation function, the spatial variance function, and the spatial distribution of total storm depth.

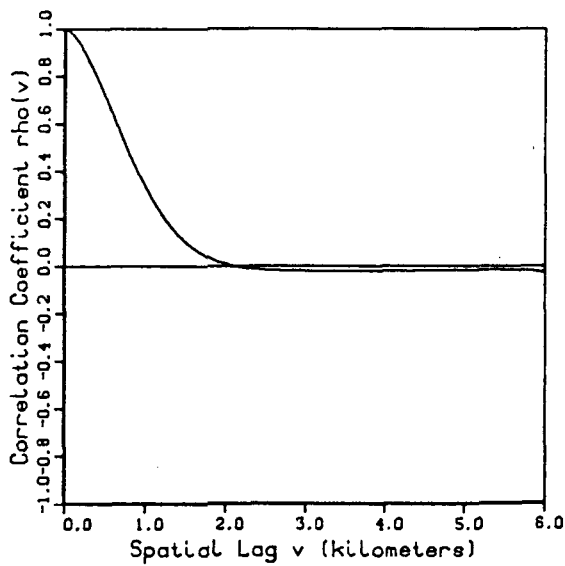
The fourth and final report in the series (No. 308) contains the split-sample parameter estimation and model evaluation as well as a numerical simulation of the stochastic models.

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

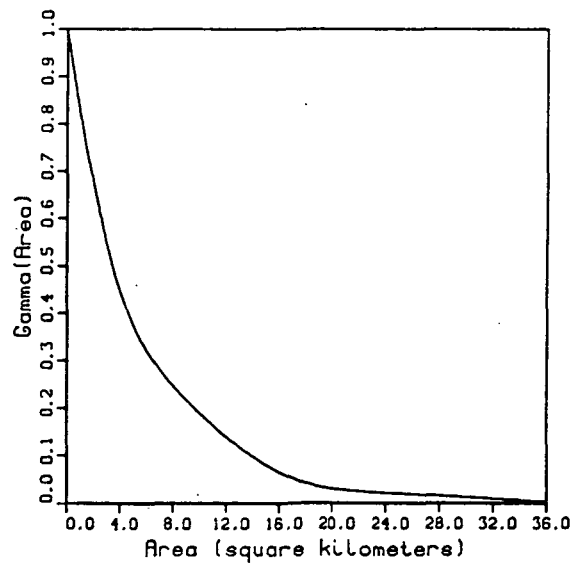
Storm Day
 June 13, 1974



Spatial Correlation



Variance Function



Storm Day June 13 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.948$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.052$

Expected Value of Point Depth (mm.): $E(Y) = 0.009$

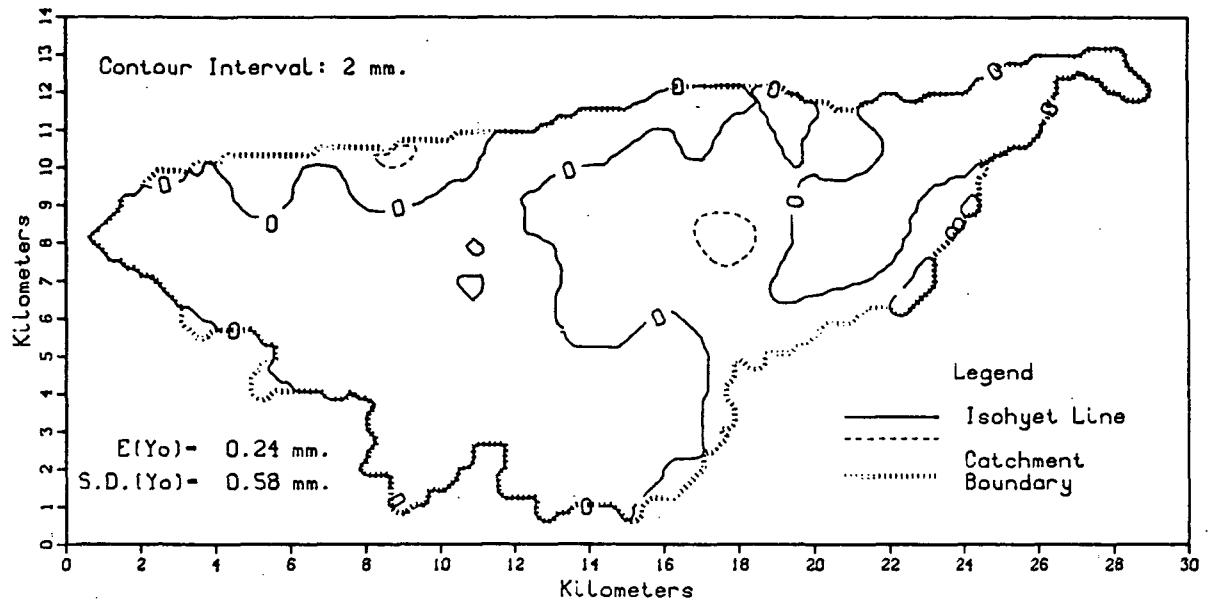
Variance of Point Depth (mm. sq.): $Var(Y) = 0.004$

Coef. of Skewness of Point Depth: $S.C.(Y) = 10.211$

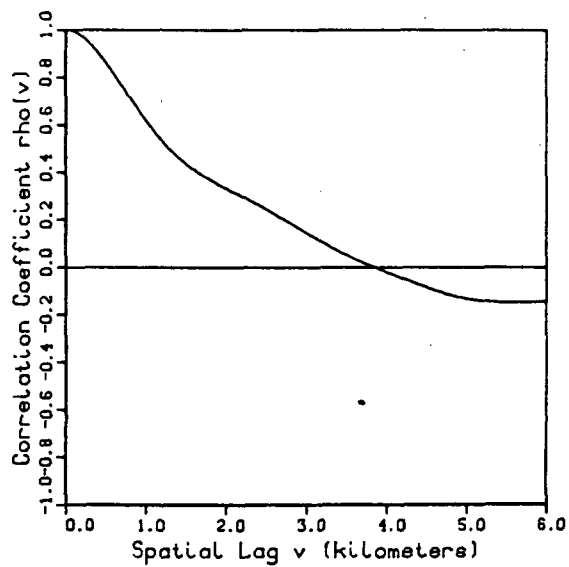
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.930	0.04	0.993
		0.4	0.796	0.16	0.972
		0.6	0.639	0.36	0.935
		0.8	0.476	0.64	0.883
		1.0	0.332	1.00	0.824
		1.2	0.219	1.44	0.756
		1.4	0.134	1.96	0.680
		1.6	0.074	2.56	0.598
		1.8	0.032	3.24	0.518
		2.0	0.006	4.00	0.446
		2.2	-.009	4.84	0.384
		2.4	-.017	5.76	0.331
		2.6	-.020	6.76	0.288
		2.8	-.022	7.84	0.250
		3.0	-.023	9.00	0.216
		3.2	-.023	10.24	0.183
		3.4	-.023	11.56	0.150
		3.6	-.023	12.96	0.118
		3.8	-.023	14.44	0.090
		4.0	-.023	16.00	0.065
		4.2	-.022	17.64	0.044
		4.4	-.021	19.36	0.032
		4.6	-.020	21.16	0.026
		4.8	-.018	23.04	0.021
		5.0	-.018	25.00	0.019
		5.2	-.017	27.04	0.016
		5.4	-.017	29.16	0.013
		5.6	-.018	31.36	0.010
		5.8	-.023	33.64	0.006
		6.0	-.029	36.00	0.000

Walnut Gulch, Arizona
Ac=154.21 sq.km.

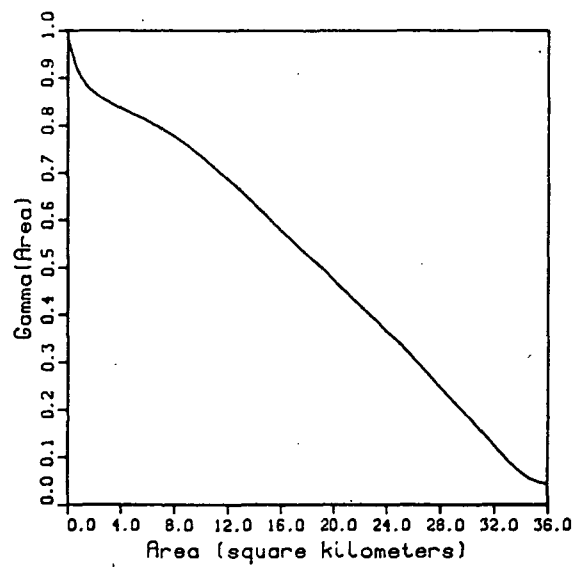
Storm Day
June 24, 1974



Spatial Correlation



Variance Function



Storm Day June 24 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.634$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.366$

Expected Value of Point Depth (mm.): $E(Y) = 0.214$

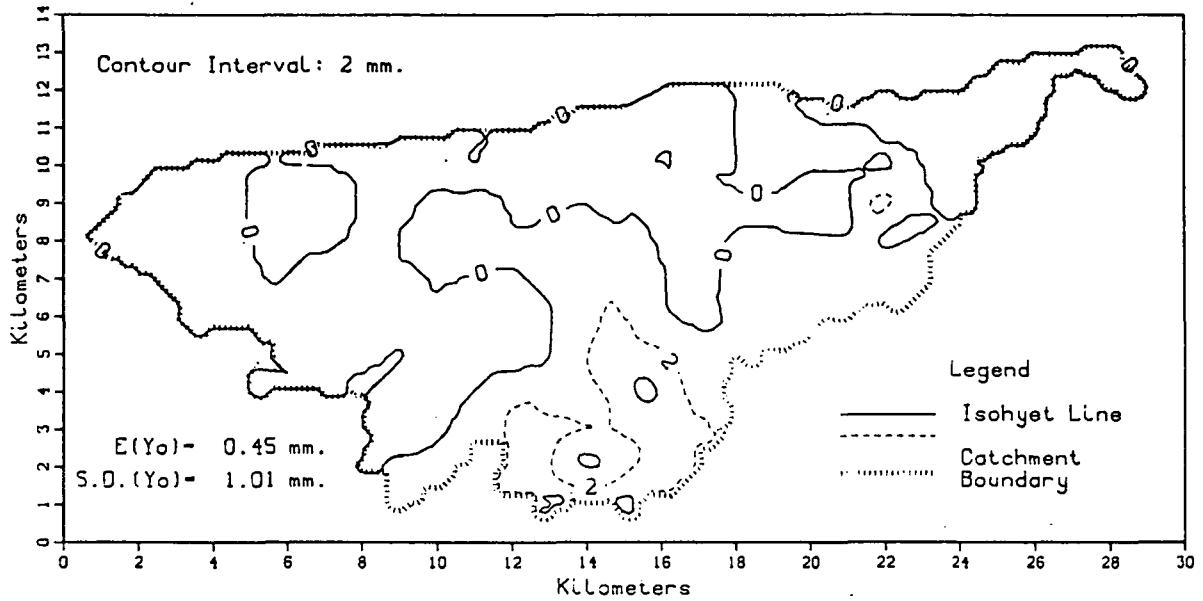
Variance of Point Depth (mm. sq.): $Var(Y) = 0.220$

Coef. of Skewness of Point Depth: $S.C.(Y) = 2.666$

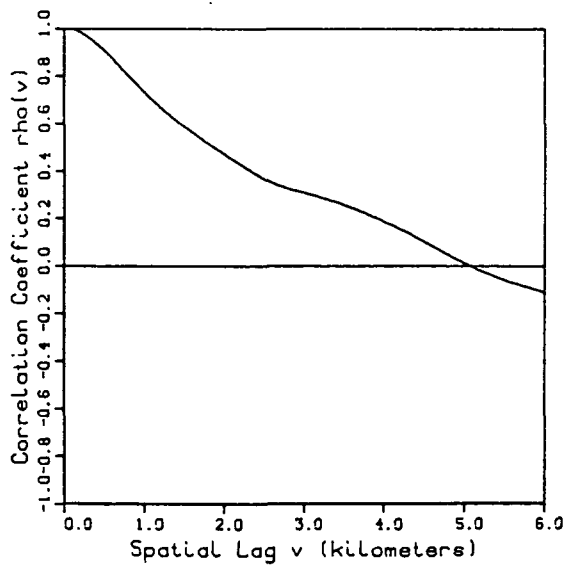
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.089	0.0	1.000	0.00	1.000
2	0.014	0.2	0.971	0.04	0.990
3	0.000	0.4	0.901	0.16	0.972
		0.6	0.808	0.36	0.949
		0.8	0.709	0.64	0.924
		1.0	0.613	1.00	0.901
		1.2	0.529	1.44	0.884
		1.4	0.460	1.96	0.869
		1.6	0.407	2.56	0.856
		1.8	0.364	3.24	0.845
		2.0	0.328	4.00	0.834
		2.2	0.294	4.84	0.823
		2.4	0.258	5.76	0.811
		2.6	0.220	6.76	0.795
		2.8	0.181	7.84	0.777
		3.0	0.141	9.00	0.755
		3.2	0.102	10.24	0.728
		3.4	0.064	11.56	0.695
		3.6	0.031	12.96	0.658
		3.8	0.002	14.44	0.618
		4.0	-.025	16.00	0.576
		4.2	-.052	17.64	0.533
		4.4	-.078	19.36	0.488
		4.6	-.102	21.16	0.440
		4.8	-.122	23.04	0.390
		5.0	-.137	25.00	0.336
		5.2	-.146	27.04	0.274
		5.4	-.151	29.16	0.210
		5.6	-.152	31.36	0.145
		5.8	-.150	33.64	0.076
		6.0	-.146	36.00	0.045

Walnut Gulch, Arizona
 $A_c = 154.21$ sq.km.

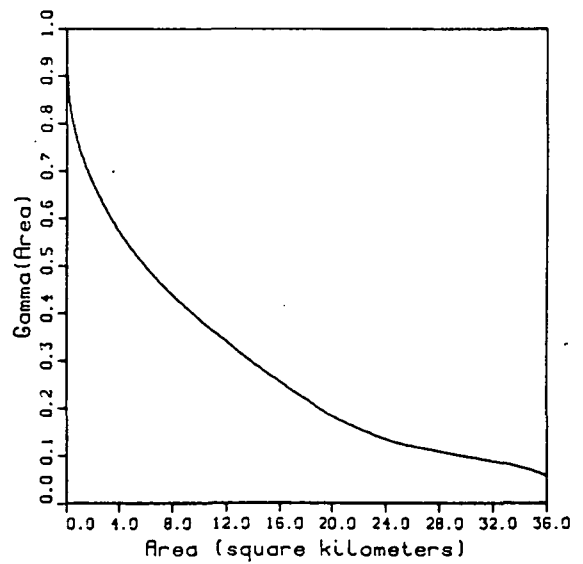
Storm Day
 June 25, 1974



Spatial Correlation



Variance Function



Storm Day June 25 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.484$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.516$

Expected Value of Point Depth (mm.): $E(Y) = 0.465$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.740$

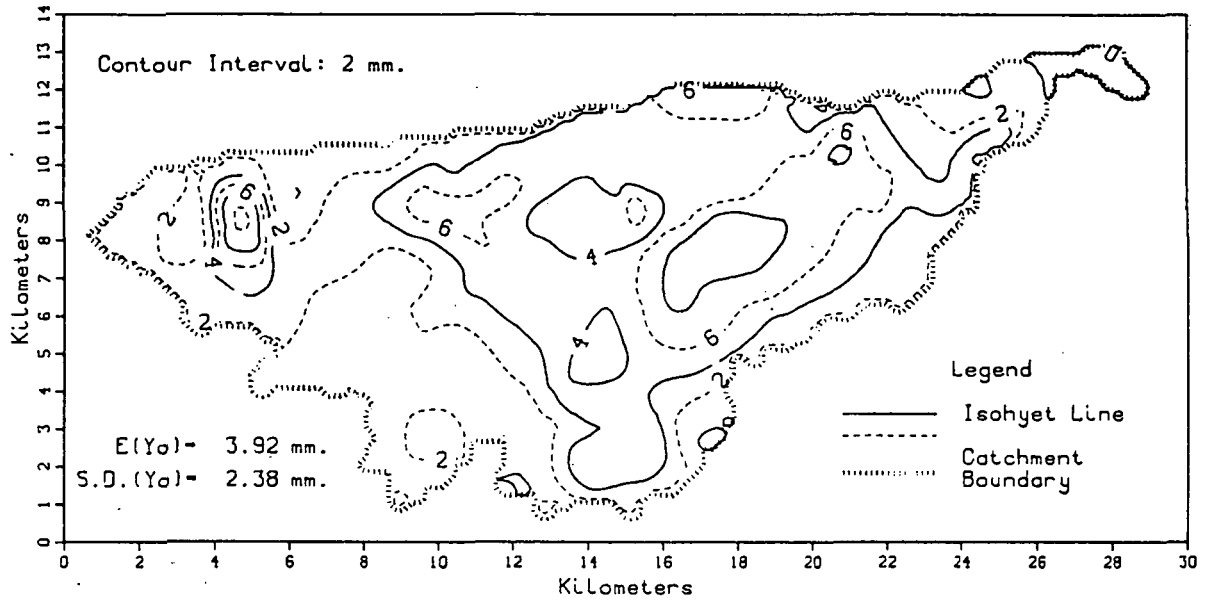
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.240$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.170	0.0	1.000	0.00	1.000
2	0.082	0.2	0.982	0.04	0.939
3	0.028	0.4	0.934	0.16	0.877
4	0.004	0.6	0.869	0.36	0.825
5	0.000	0.8	0.797	0.64	0.782
		1.0	0.727	1.00	0.745
		1.2	0.662	1.44	0.709
		1.4	0.607	1.96	0.674
		1.6	0.557	2.56	0.639
		1.8	0.511	3.24	0.604
		2.0	0.466	4.00	0.570
		2.2	0.422	4.84	0.536
		2.4	0.381	5.76	0.503
		2.6	0.345	6.76	0.471
		2.8	0.321	7.84	0.440
		3.0	0.303	9.00	0.410
		3.2	0.285	10.24	0.379
		3.4	0.264	11.56	0.348
		3.6	0.239	12.96	0.316
		3.8	0.212	14.44	0.285
		4.0	0.183	16.00	0.254
		4.2	0.151	17.64	0.222
		4.4	0.116	19.36	0.192
		4.6	0.080	21.16	0.165
		4.8	0.044	23.04	0.142
		5.0	0.007	25.00	0.123
		5.2	-.023	27.04	0.112
		5.4	-.051	29.16	0.100
		5.6	-.075	31.36	0.090
		5.8	-.096	33.64	0.077
		6.0	-.115	36.00	0.056

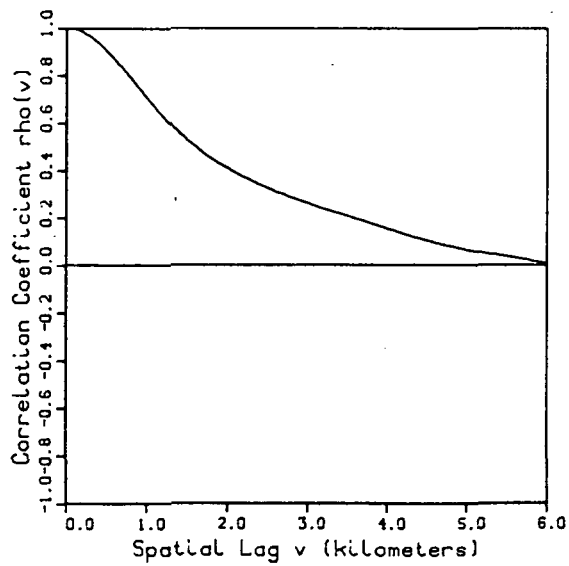
Walnut Gulch, Arizona

Ac=154.21 sq.km.

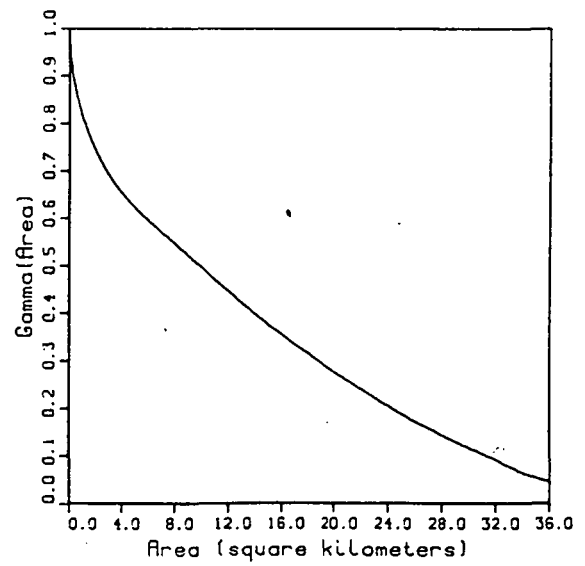
Storm Day
June 26, 1974



Spatial Correlation



Variance Function



Storm Day June 26 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.011$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.989$

Expected Value of Point Depth (mm.): $E(Y) = 3.877$

Variance of Point Depth (mm. sq.): $Var(Y) = 4.625$

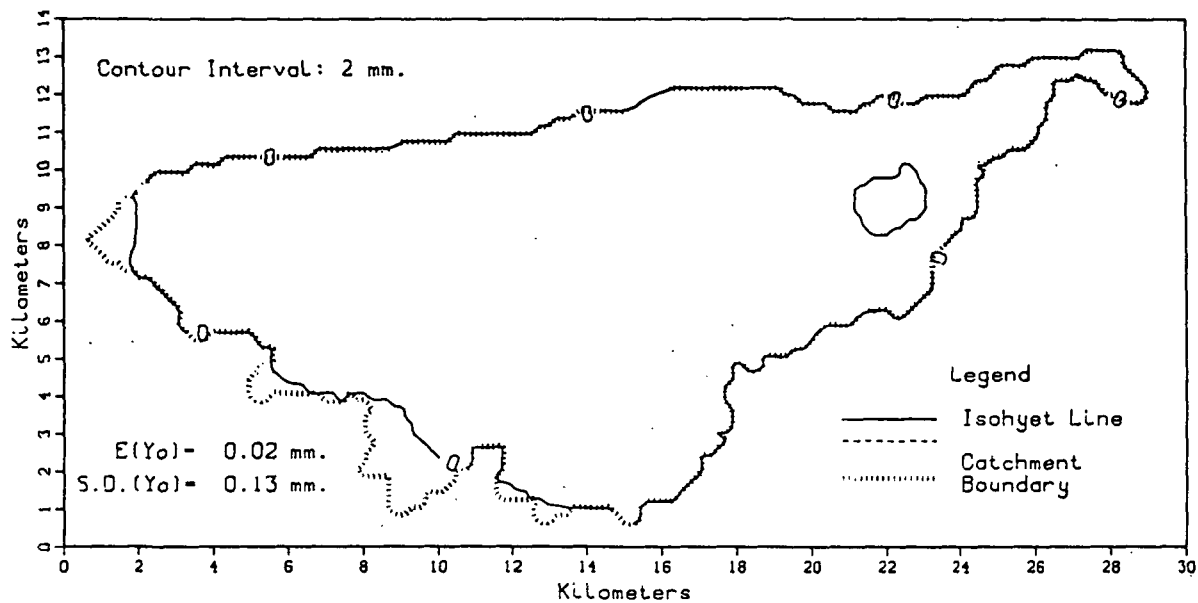
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.357$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.932	0.0	1.000	0.00	1.000
2	0.778	0.2	0.982	0.04	0.969
3	0.650	0.4	0.935	0.16	0.931
4	0.488	0.6	0.866	0.36	0.891
5	0.297	0.8	0.786	0.64	0.855
6	0.165	1.0	0.702	1.00	0.818
7	0.092	1.2	0.624	1.44	0.780
8	0.040	1.4	0.555	1.96	0.744
9	0.015	1.6	0.496	2.56	0.711
10	0.001	1.8	0.447	3.24	0.680
11	0.000	2.0	0.405	4.00	0.652
		2.2	0.369	4.84	0.625
		2.4	0.337	5.76	0.599
		2.6	0.308	6.76	0.574
		2.8	0.282	7.84	0.548
		3.0	0.258	9.00	0.519
		3.2	0.236	10.24	0.488
		3.4	0.216	11.56	0.455
		3.6	0.195	12.96	0.422
		3.8	0.174	14.44	0.388
		4.0	0.153	16.00	0.354
		4.2	0.131	17.64	0.320
		4.4	0.111	19.36	0.286
		4.6	0.094	21.16	0.253
		4.8	0.079	23.04	0.220
		5.0	0.064	25.00	0.186
		5.2	0.052	27.04	0.155
		5.4	0.041	29.16	0.125
		5.6	0.030	31.36	0.099
		5.8	0.018	33.64	0.067
		6.0	0.004	36.00	0.045

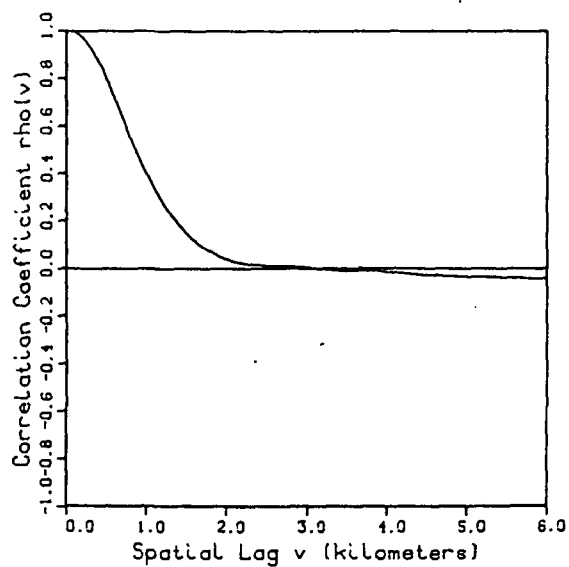
Walnut Gulch, Arizona

$A_c = 154.21 \text{ sq.km.}$

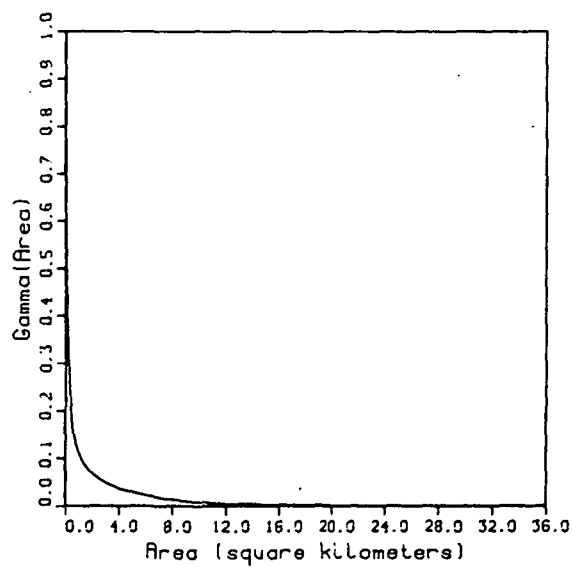
Storm Day
June 27, 1974



Spatial Correlation



Variance Function



Storm Day June 27 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.945$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.055$

Expected Value of Point Depth (mm.): $E(Y) = 0.013$

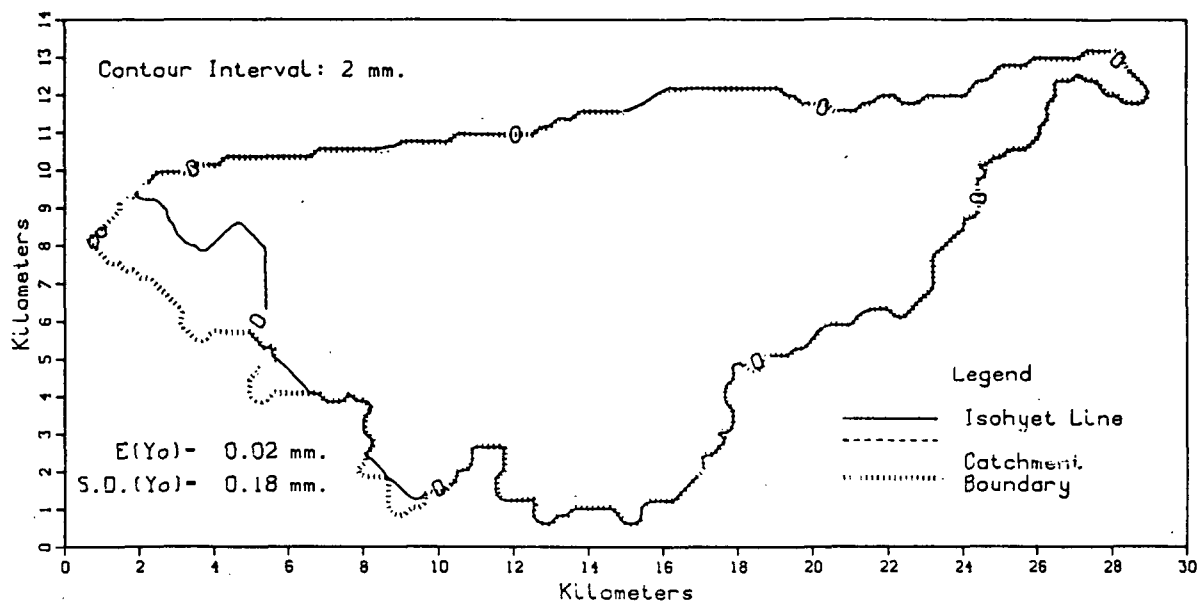
Variance of Point Depth (mm. sq.): $Var(Y) = 0.006$

Coef. of Skewness of Point Depth: $S.C.(Y) = 7.313$

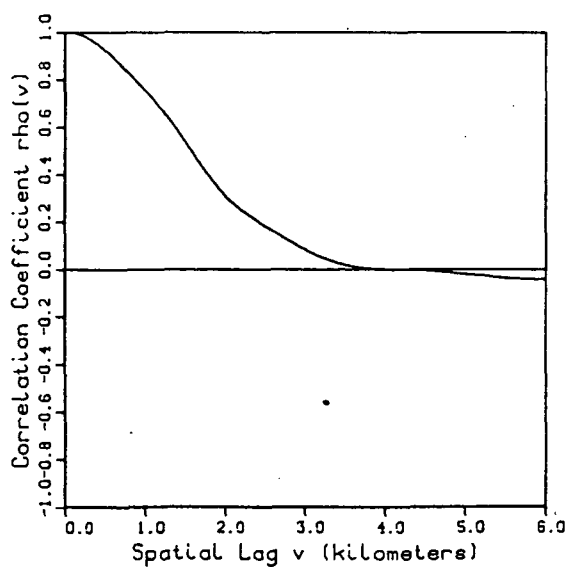
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.968	0.04	0.642
		0.4	0.870	0.16	0.399
		0.6	0.718	0.36	0.244
		0.8	0.543	0.64	0.153
		1.0	0.395	1.00	0.114
		1.2	0.276	1.44	0.088
		1.4	0.181	1.96	0.069
		1.6	0.112	2.56	0.055
		1.8	0.066	3.24	0.045
		2.0	0.033	4.00	0.036
		2.2	0.017	4.84	0.029
		2.4	0.009	5.76	0.023
		2.6	0.007	6.76	0.018
		2.8	0.006	7.84	0.013
		3.0	-.001	9.00	0.010
		3.2	-.007	10.24	0.007
		3.4	-.013	11.56	0.005
		3.6	-.013	12.96	0.004
		3.8	-.012	14.44	0.003
		4.0	-.020	16.00	0.002
		4.2	-.026	17.64	0.002
		4.4	-.031	19.36	0.001
		4.6	-.034	21.16	0.001
		4.8	-.036	23.04	0.000
		5.0	-.038	25.00	0.000
		5.2	-.040	27.04	0.000
		5.4	-.042	29.16	0.000
		5.6	-.045	31.36	0.000
		5.8	-.047	33.64	0.000
		6.0	-.047	36.00	0.000

Walnut Gulch, Arizona
Ac=154.21 sq.km.

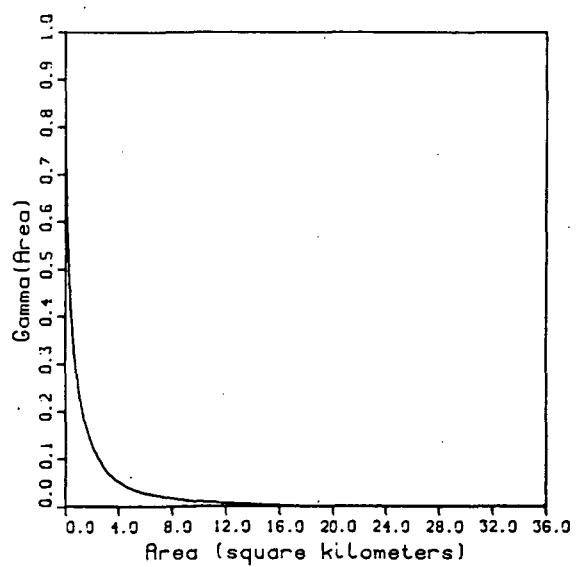
Storm Day
July 1, 1974



Spatial Correlation



Variance Function



Storm Day July 1 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.936$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.064$

Expected Value of Point Depth (mm.): $E(Y) = 0.027$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.020$

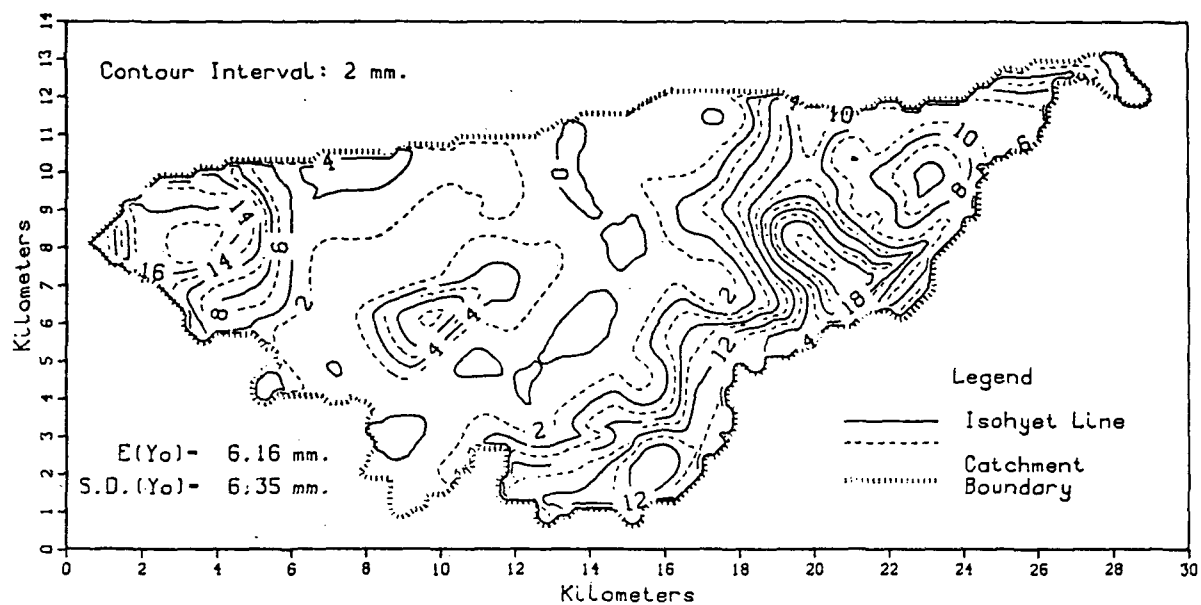
Coef. of Skewness of Point Depth: $S.C.(Y) = 6.220$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.005	0.0	1.000	0.00	1.000
2	0.000	0.2	0.987	0.04	0.767
		0.4	0.949	0.16	0.572
		0.6	0.892	0.36	0.441
		0.8	0.823	0.64	0.332
		1.0	0.750	1.00	0.243
		1.2	0.670	1.44	0.177
		1.4	0.581	1.96	0.131
		1.6	0.484	2.56	0.095
		1.8	0.390	3.24	0.068
		2.0	0.307	4.00	0.051
		2.2	0.248	4.84	0.038
		2.4	0.203	5.76	0.028
		2.6	0.158	6.76	0.022
		2.8	0.118	7.84	0.016
		3.0	0.080	9.00	0.012
		3.2	0.048	10.24	0.009
		3.4	0.024	11.56	0.006
		3.6	0.010	12.96	0.004
		3.8	0.001	14.44	0.003
		4.0	-.002	16.00	0.001
		4.2	-.003	17.64	0.000
		4.4	-.004	19.36	0.000
		4.6	-.010	21.16	0.000
		4.8	-.017	23.04	0.000
		5.0	-.024	25.00	0.000
		5.2	-.030	27.04	0.000
		5.4	-.036	29.16	0.000
		5.6	-.042	31.36	0.000
		5.8	-.044	33.64	0.000
		6.0	-.046	36.00	0.000

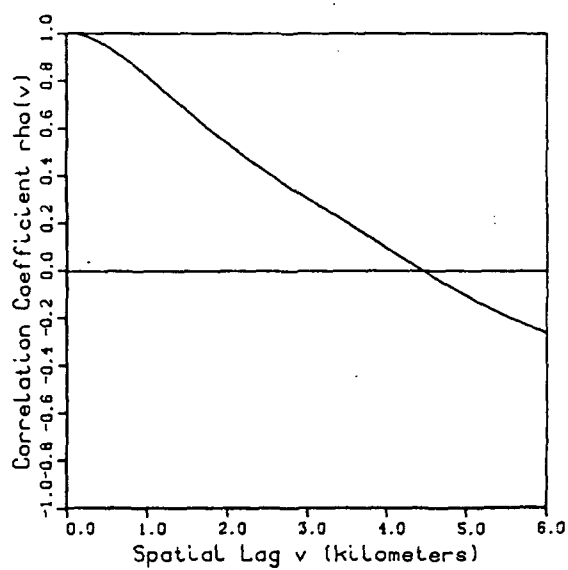
Walnut Gulch, Arizona

Ac=154.21 sq.km.

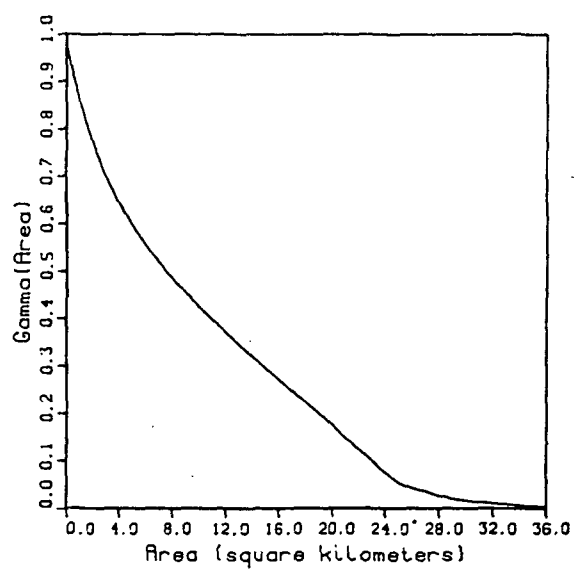
Storm Day
July 2, 1974



Spatial Correlation



Variance Function



Storm Day July 2 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.037$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.963$

Expected Value of Point Depth (mm.): $E(Y) = 6.290$

Variance of Point Depth (mm. sq.): $Var(Y) = 37.574$

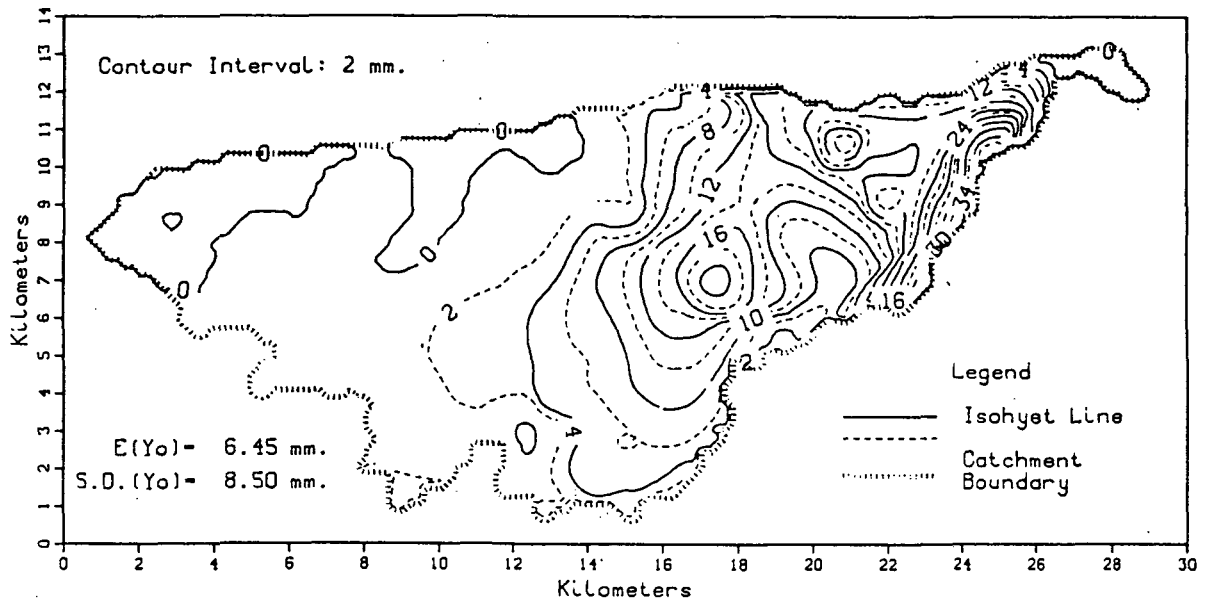
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.036$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho(v)		Variance Function A (km.sq.) Gamma(A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.778	0.0	1.000	0.00	1.000
2	0.653	0.2	0.989	0.04	0.983
3	0.566	0.4	0.960	0.16	0.962
4	0.493	0.6	0.919	0.36	0.933
5	0.437	0.8	0.869	0.64	0.899
6	0.403	1.0	0.813	1.00	0.860
7	0.372	1.2	0.754	1.44	0.818
8	0.341	1.4	0.696	1.96	0.775
9	0.307	1.6	0.638	2.56	0.730
10	0.265	1.8	0.583	3.24	0.685
11	0.218	2.0	0.531	4.00	0.643
12	0.188	2.2	0.480	4.84	0.601
13	0.160	2.4	0.432	5.76	0.561
14	0.132	2.6	0.386	6.76	0.524
15	0.107	2.8	0.342	7.84	0.487
16	0.087	3.0	0.300	9.00	0.452
17	0.065	3.2	0.259	10.24	0.417
18	0.048	3.4	0.217	11.56	0.381
19	0.037	3.6	0.175	12.96	0.345
20	0.031	3.8	0.132	14.44	0.308
21	0.026	4.0	0.089	16.00	0.270
22	0.023	4.2	0.047	17.64	0.231
23	0.019	4.4	0.006	19.36	0.189
24	0.015	4.6	-0.035	21.16	0.144
25	0.010	4.8	-0.074	23.04	0.099
26	0.003	5.0	-0.112	25.00	0.053
27	0.000	5.2	-0.147	27.04	0.034
28	0.000	5.4	-0.181	29.16	0.018
29	0.000	5.6	-0.212	31.36	0.012
		5.8	-0.241	33.64	0.006
		6.0	-0.268	36.00	0.002

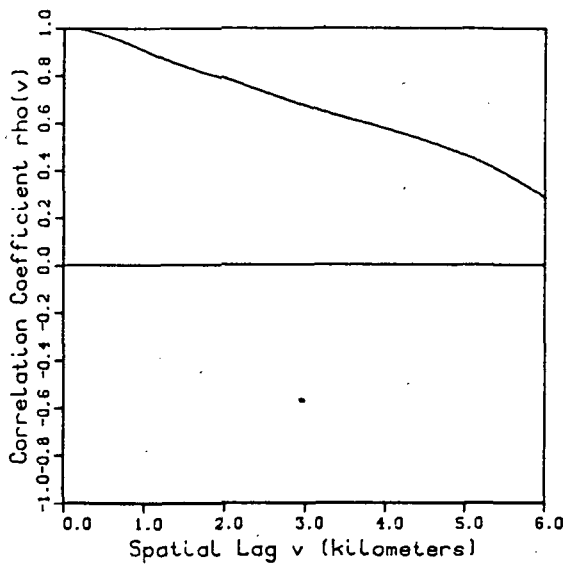
Walnut Gulch, Arizona

Ac=154.21 sq.km.

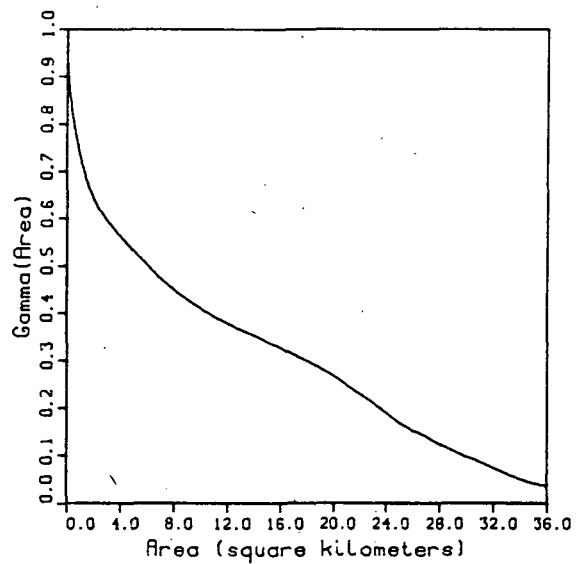
Storm Day
July 3, 1974



Spatial Correlation



Variance Function



Storm Day July 3 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.111$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.889$

Expected Value of Point Depth (mm.): $E(Y) = 6.672$

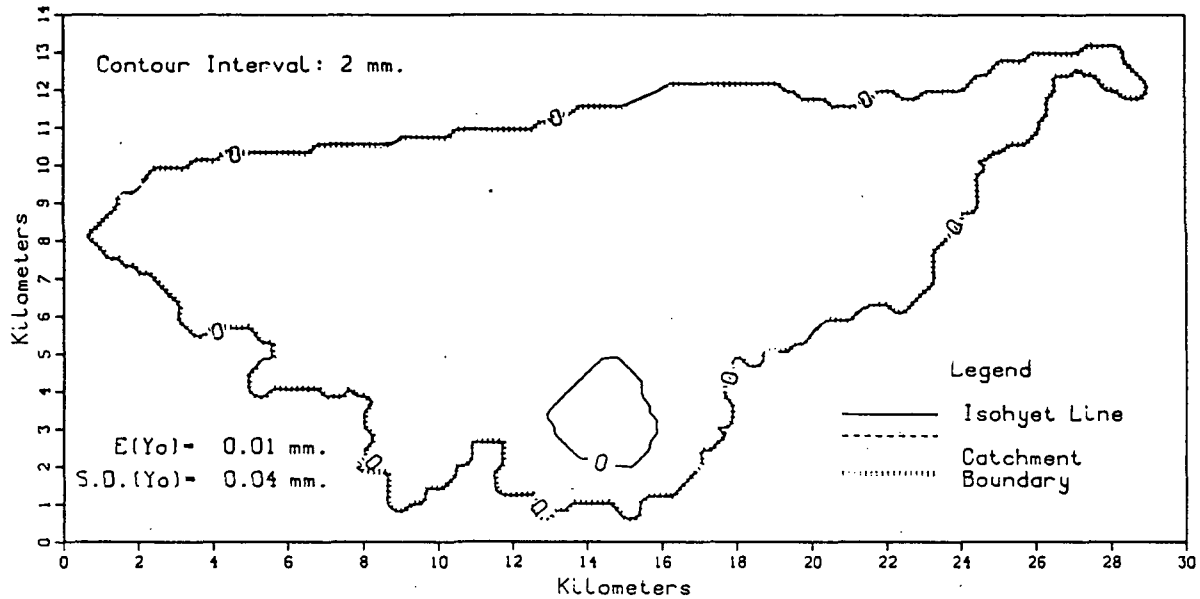
Variance of Point Depth (mm. sq.): $Var(Y) = 65.137$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.499$

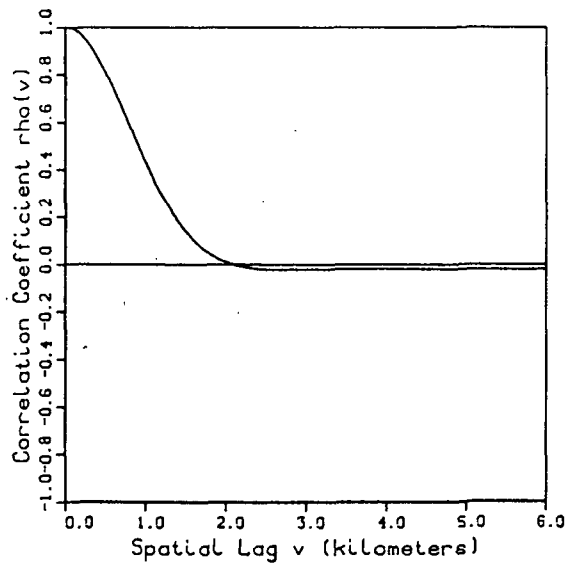
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.643	0.0	1.000	0.00	1.000
3	0.516	0.2	0.994	0.04	0.945
5	0.443	0.4	0.979	0.16	0.891
7	0.357	0.6	0.957	0.36	0.837
9	0.293	0.8	0.931	0.64	0.784
11	0.242	1.0	0.902	1.00	0.733
13	0.201	1.2	0.873	1.44	0.684
15	0.158	1.4	0.847	1.96	0.641
17	0.128	1.6	0.823	2.56	0.611
19	0.100	1.8	0.802	3.24	0.586
21	0.062	2.0	0.784	4.00	0.560
23	0.042	2.2	0.761	4.84	0.534
25	0.033	2.4	0.737	5.76	0.507
27	0.025	2.6	0.713	6.76	0.478
29	0.020	2.8	0.690	7.84	0.450
31	0.015	3.0	0.668	9.00	0.426
33	0.010	3.2	0.648	10.24	0.403
35	0.007	3.4	0.628	11.56	0.383
37	0.005	3.6	0.609	12.96	0.363
39	0.003	3.8	0.591	14.44	0.345
41	0.001	4.0	0.572	16.00	0.325
43	0.000	4.2	0.553	17.64	0.302
		4.4	0.533	19.36	0.276
		4.6	0.511	21.16	0.245
		4.8	0.487	23.04	0.209
		5.0	0.462	25.00	0.167
		5.2	0.433	27.04	0.137
		5.4	0.401	29.16	0.106
		5.6	0.366	31.36	0.081
		5.8	0.326	33.64	0.053
		6.0	0.282	36.00	0.035

Walnut Gulch, Arizona
Ac=154.21 sq.km.

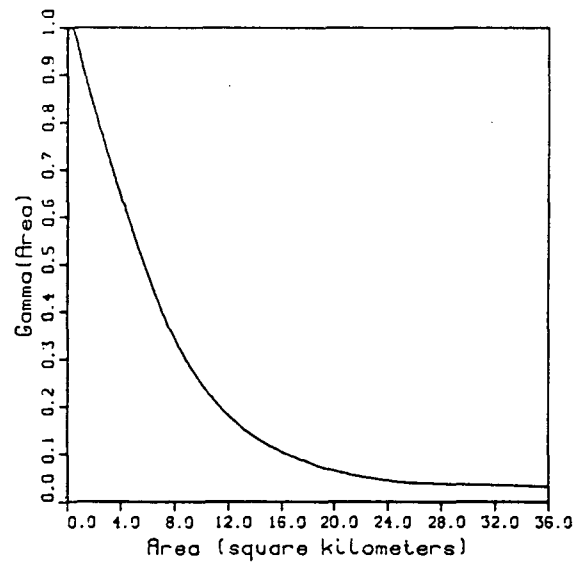
Storm Day
July 5, 1974



Spatial Correlation



Variance Function



Storm Day July 5 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.957$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.043$

Expected Value of Point Depth (mm.): $E(Y) = 0.004$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.001$

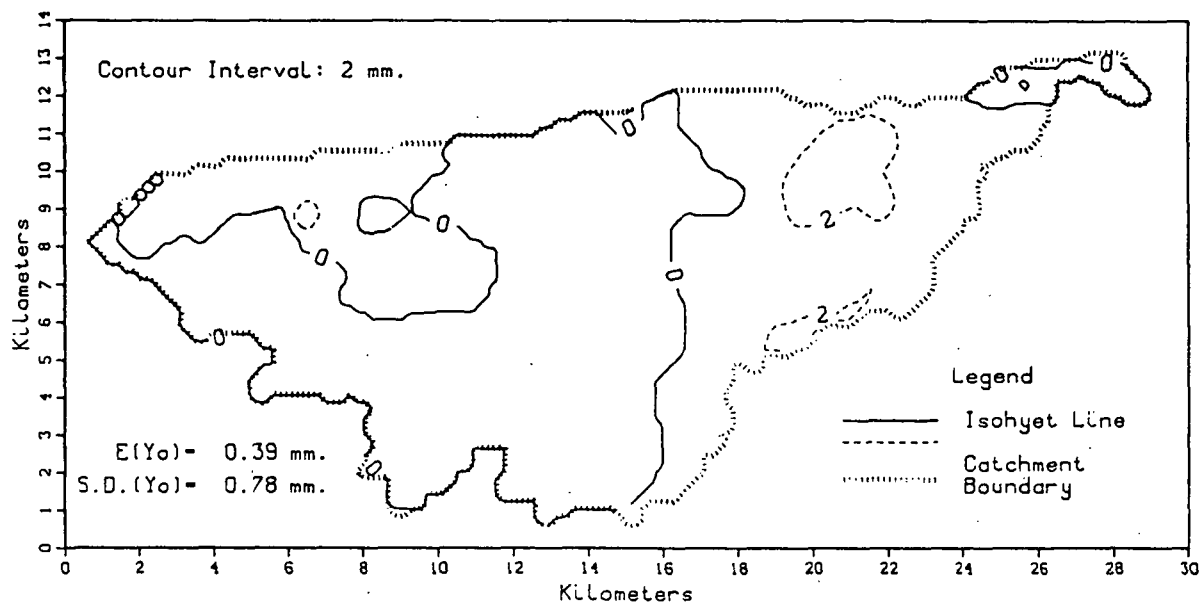
Coef. of Skewness of Point Depth: $S.C.(Y) = 7.889$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.965	0.04	1.023
		0.4	0.870	0.16	1.026
		0.6	0.733	0.36	1.009
		0.8	0.579	0.64	0.975
		1.0	0.426	1.00	0.931
		1.2	0.290	1.44	0.883
		1.4	0.179	1.96	0.830
		1.6	0.097	2.56	0.773
		1.8	0.041	3.24	0.711
		2.0	0.006	4.00	0.643
		2.2	-.013	4.84	0.569
		2.4	-.021	5.76	0.493
		2.6	-.024	6.76	0.418
		2.8	-.024	7.84	0.348
		3.0	-.023	9.00	0.289
		3.2	-.021	10.24	0.237
		3.4	-.020	11.56	0.193
		3.6	-.020	12.96	0.156
		3.8	-.020	14.44	0.127
		4.0	-.020	16.00	0.104
		4.2	-.021	17.64	0.084
		4.4	-.022	19.36	0.069
		4.6	-.023	21.16	0.056
		4.8	-.023	23.04	0.047
		5.0	-.024	25.00	0.040
		5.2	-.024	27.04	0.038
		5.4	-.024	29.16	0.036
		5.6	-.024	31.36	0.035
		5.8	-.024	33.64	0.034
		6.0	-.024	36.00	0.031

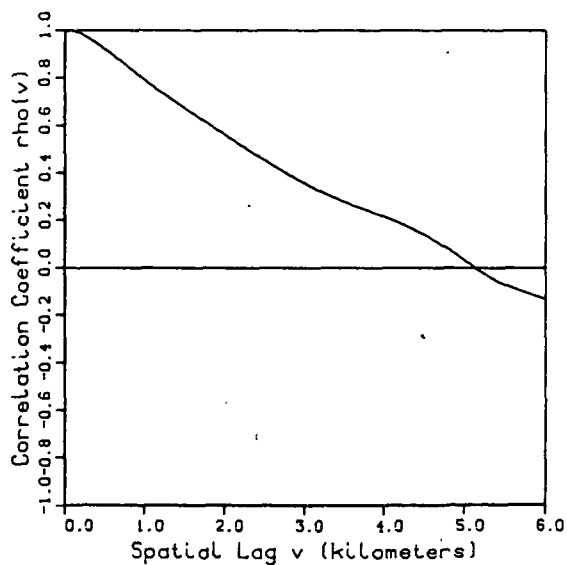
Walnut Gulch, Arizona

Ac=154.21 sq.km.

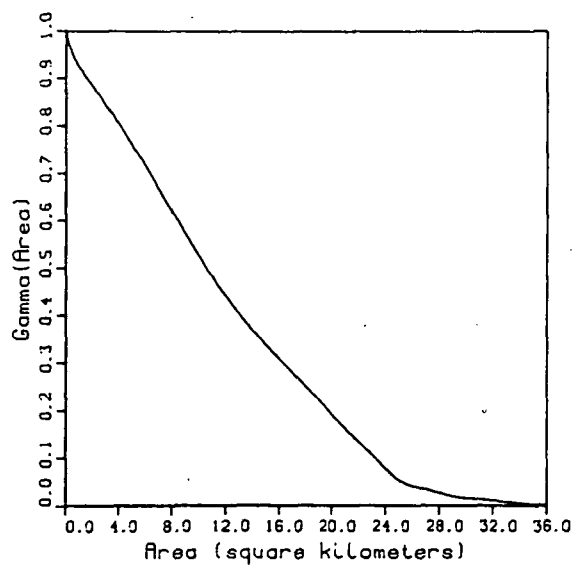
Storm Day
July 6, 1974



Spatial Correlation



Variance Function



Storm Day July 6 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.514$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.486$

Expected Value of Point Depth (mm.): $E(Y) = 0.359$

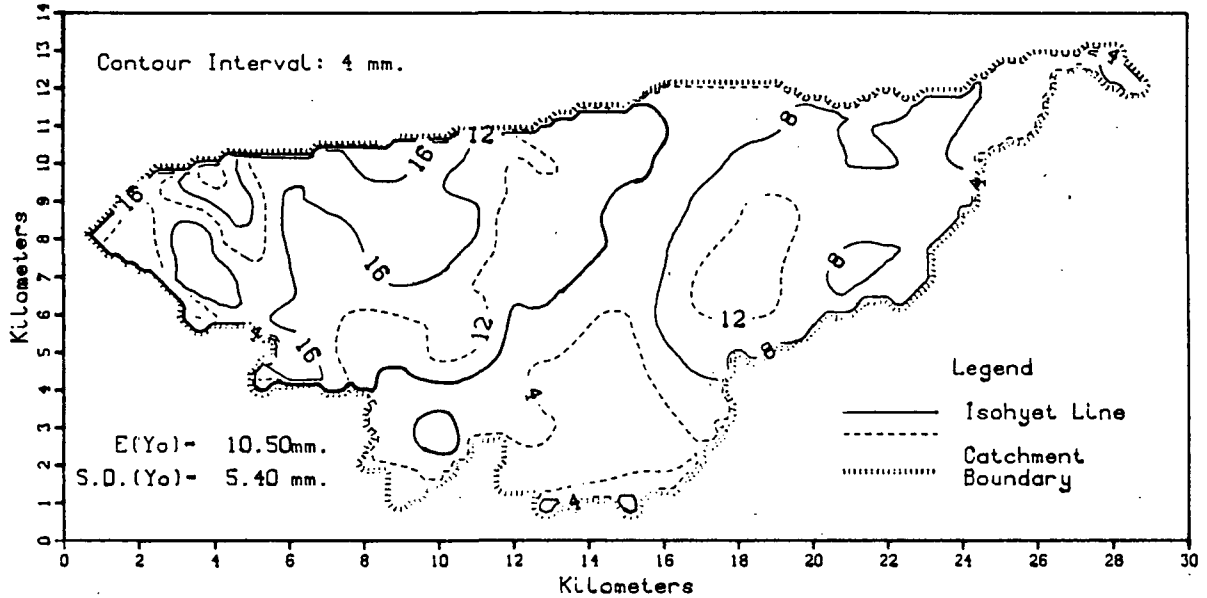
Variance of Point Depth (mm. sq.): $Var(Y) = 0.434$

Coef. of Skewness of Point Depth: $S.C.(Y) = 2.289$

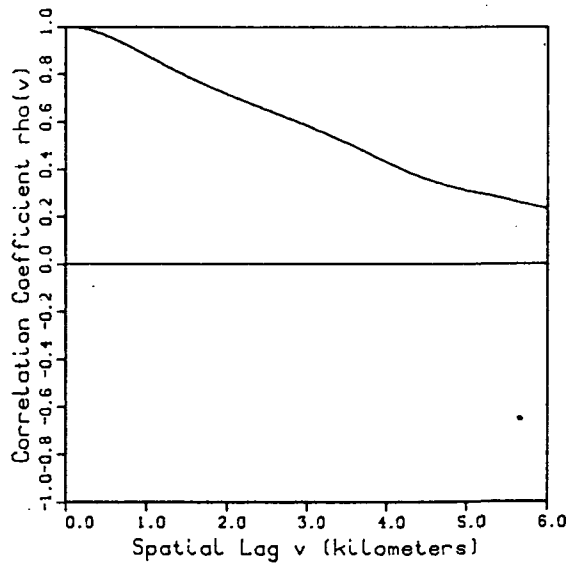
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.125	0.0	1.000	0.00	1.000
2	0.051	0.2	0.981	0.04	0.992
3	0.008	0.4	0.942	0.16	0.978
4	0.000	0.6	0.893	0.36	0.962
		0.8	0.840	0.64	0.943
		1.0	0.787	1.00	0.924
		1.2	0.736	1.44	0.906
		1.4	0.689	1.96	0.886
		1.6	0.645	2.56	0.861
		1.8	0.601	3.24	0.834
		2.0	0.557	4.00	0.802
		2.2	0.512	4.84	0.766
		2.4	0.469	5.76	0.725
		2.6	0.427	6.76	0.677
		2.8	0.387	7.84	0.625
		3.0	0.350	9.00	0.571
		3.2	0.317	10.24	0.514
		3.4	0.287	11.56	0.458
		3.6	0.260	12.96	0.404
		3.8	0.234	14.44	0.355
		4.0	0.209	16.00	0.307
		4.2	0.181	17.64	0.259
		4.4	0.149	19.36	0.209
		4.6	0.114	21.16	0.156
		4.8	0.074	23.04	0.104
		5.0	0.027	25.00	0.051
		5.2	-.021	27.04	0.033
		5.4	-.062	29.16	0.018
		5.6	-.091	31.36	0.012
		5.8	-.115	33.64	0.005
		6.0	-.137	36.00	0.001

Walnut Gulch, Arizona
Ac=154.21 sq.km.

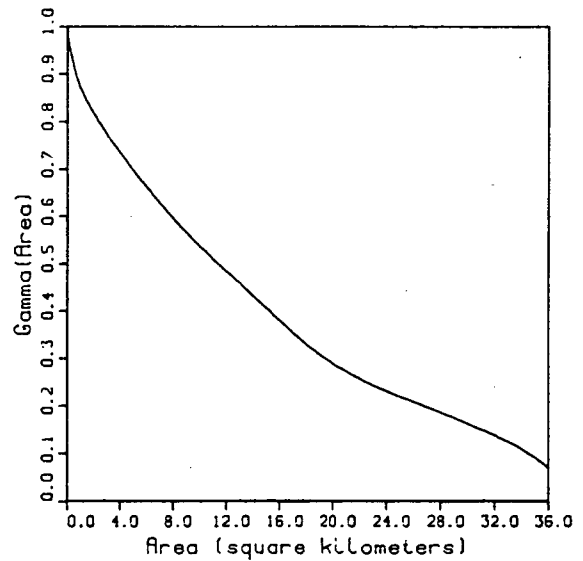
Storm Day
July 7, 1974



Spatial Correlation



Variance Function



Storm Day July 7 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 10.464$

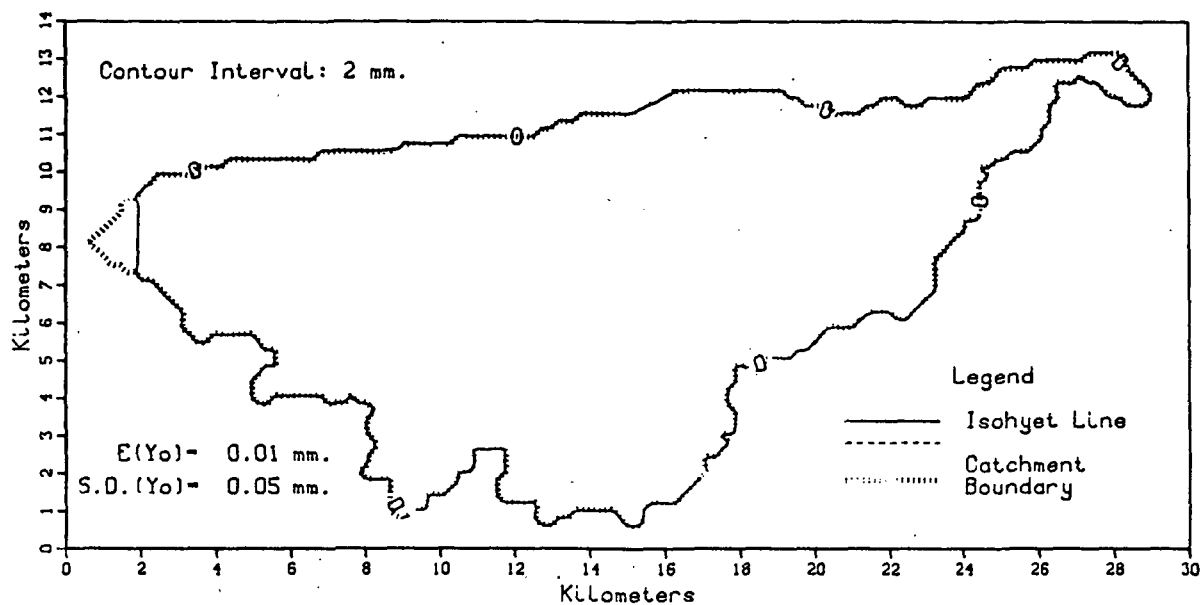
Variance of Point Depth (mm. sq.): $Var(Y) = 26.176$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.596$

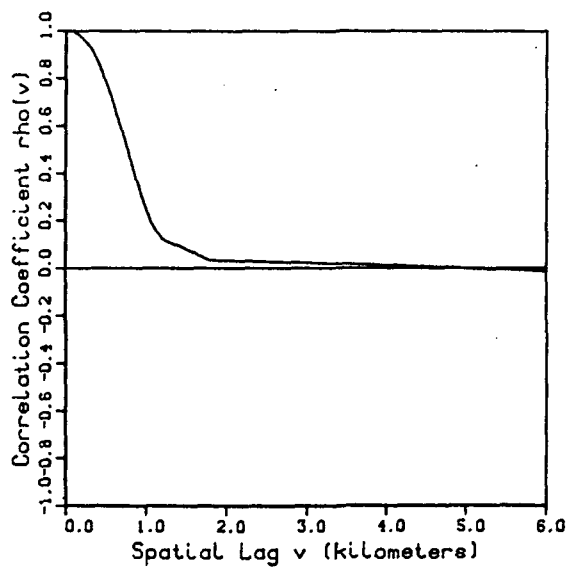
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.998	0.0	1.000	0.00	1.000
2	0.963	0.2	0.992	0.04	0.983
3	0.938	0.4	0.972	0.16	0.960
4	0.910	0.6	0.945	0.36	0.931
5	0.881	0.8	0.912	0.64	0.901
6	0.833	1.0	0.876	1.00	0.872
7	0.760	1.2	0.839	1.44	0.845
8	0.663	1.4	0.804	1.96	0.819
9	0.557	1.6	0.771	2.56	0.791
10	0.478	1.8	0.741	3.24	0.762
11	0.398	2.0	0.712	4.00	0.733
12	0.333	2.2	0.685	4.84	0.701
13	0.280	2.4	0.658	5.76	0.668
14	0.232	2.6	0.633	6.76	0.634
15	0.196	2.8	0.607	7.84	0.598
16	0.167	3.0	0.580	9.00	0.563
17	0.125	3.2	0.552	10.24	0.529
18	0.085	3.4	0.522	11.56	0.494
19	0.058	3.6	0.492	12.96	0.458
20	0.039	3.8	0.459	14.44	0.420
21	0.030	4.0	0.427	16.00	0.379
22	0.023	4.2	0.396	17.64	0.336
23	0.017	4.4	0.368	19.36	0.299
24	0.012	4.6	0.345	21.16	0.269
25	0.009	4.8	0.325	23.04	0.241
26	0.006	5.0	0.307	25.00	0.218
27	0.004	5.2	0.292	27.04	0.195
28	0.002	5.4	0.277	29.16	0.171
29	0.000	5.6	0.261	31.36	0.145
30	0.000	5.8	0.245	33.64	0.114
		0.0	0.000	0.00	0.000

Walnut Gulch, Arizona
Ac=154.21 sq.km.

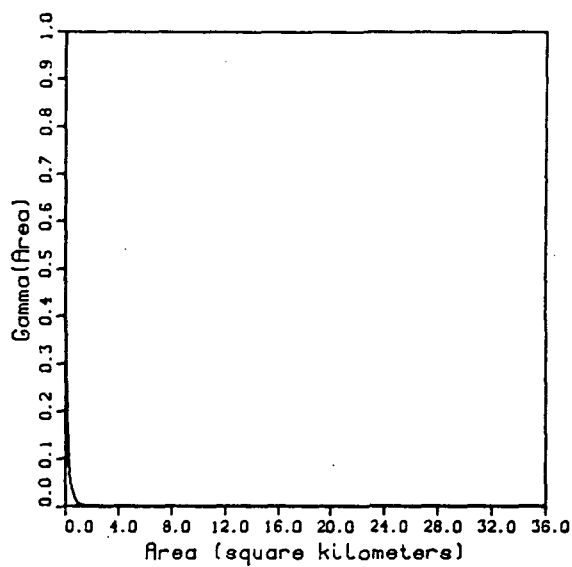
Storm Day
July 9, 1974



Spatial Correlation



Variance Function



Storm Day July 9 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.992$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.008$

Expected Value of Point Depth (mm.): $E(Y) = 0.001$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.000$

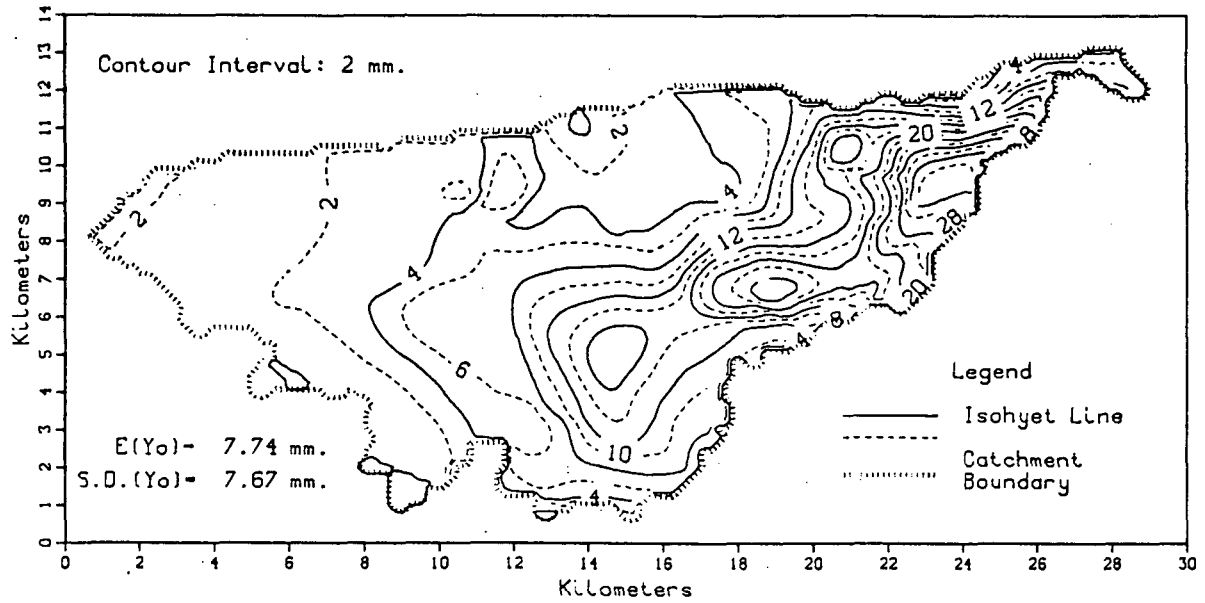
Coef. of Skewness of Point Depth: $S.C.(Y) = 16.758$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.971	0.04	0.485
		0.4	0.872	0.16	0.227
		0.6	0.690	0.36	0.070
		0.8	0.469	0.64	0.027
		1.0	0.247	1.00	0.005
		1.2	0.125	1.44	0.001
		1.4	0.094	1.96	0.001
		1.6	0.062	2.56	0.000
		1.8	0.033	3.24	0.000
		2.0	0.031	4.00	0.000
		2.2	0.029	4.84	0.000
		2.4	0.027	5.76	0.000
		2.6	0.025	6.76	0.000
		2.8	0.022	7.84	0.000
		3.0	0.020	9.00	0.000
		3.2	0.018	10.24	0.000
		3.4	0.016	11.56	0.000
		3.6	0.014	12.96	0.000
		3.8	0.012	14.44	0.000
		4.0	0.009	16.00	0.000
		4.2	0.007	17.64	0.000
		4.4	0.004	19.36	0.000
		4.6	0.002	21.16	0.000
		4.8	0.000	23.04	0.000
		5.0	-.003	25.00	0.000
		5.2	-.005	27.04	0.000
		5.4	-.008	29.16	0.000
		5.6	-.010	31.36	0.000
		5.8	-.012	33.64	0.000
		6.0	-.015	36.00	0.000

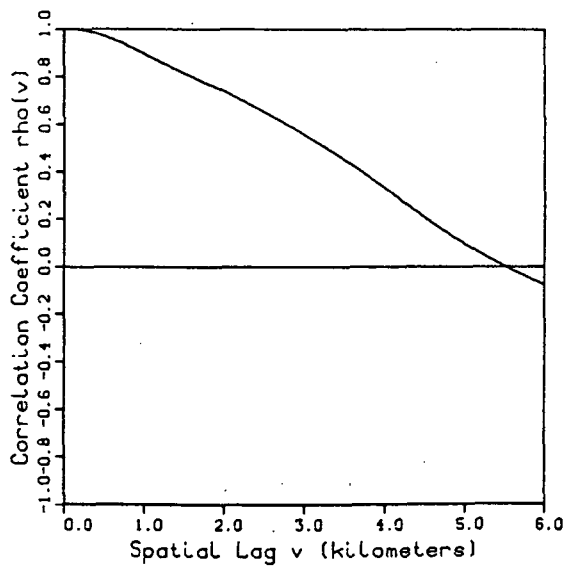
Walnut Gulch, Arizona

$A_c = 154.21 \text{ sq.km.}$

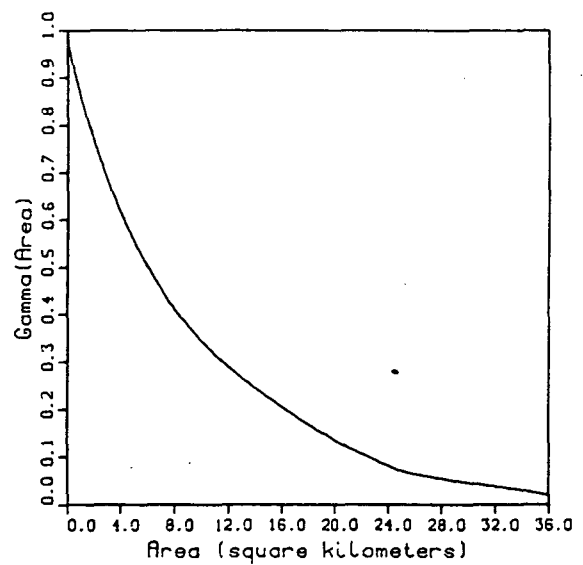
Storm Day
July 13, 1974



Spatial Correlation



Variance Function



Storm Day July 13 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.005$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.995$

Expected Value of Point Depth (mm.): $E(Y) = 8.381$

Variance of Point Depth (mm. sq.): $Var(Y) = 56.733$

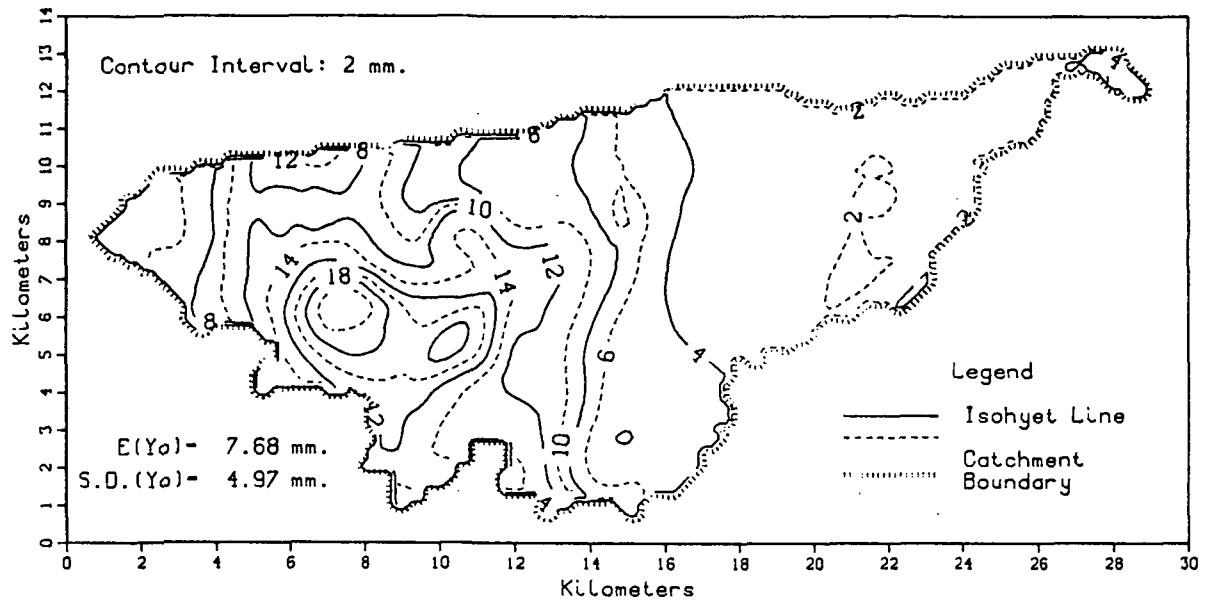
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.276$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.919	0.0	1.000	0.00	1.000
2	0.823	0.2	0.994	0.04	0.980
3	0.715	0.4	0.979	0.16	0.959
4	0.623	0.6	0.955	0.36	0.932
5	0.561	0.8	0.925	0.64	0.899
6	0.501	1.0	0.892	1.00	0.860
7	0.444	1.2	0.859	1.44	0.817
8	0.387	1.4	0.826	1.96	0.768
9	0.356	1.6	0.794	2.56	0.717
10	0.327	1.8	0.764	3.24	0.665
11	0.297	2.0	0.735	4.00	0.613
12	0.266	2.2	0.700	4.84	0.562
13	0.237	2.4	0.665	5.76	0.512
14	0.208	2.6	0.628	6.76	0.462
15	0.178	2.8	0.590	7.84	0.415
16	0.157	3.0	0.552	9.00	0.373
17	0.137	3.2	0.511	10.24	0.334
18	0.121	3.4	0.468	11.56	0.298
19	0.107	3.6	0.423	12.96	0.265
20	0.095	3.8	0.376	14.44	0.235
21	0.080	4.0	0.327	16.00	0.204
22	0.068	4.2	0.276	17.64	0.173
23	0.060	4.4	0.226	19.36	0.144
24	0.051	4.6	0.178	21.16	0.117
25	0.041	4.8	0.133	23.04	0.092
26	0.036	5.0	0.091	25.00	0.069
27	0.031	5.2	0.052	27.04	0.058
28	0.028	5.4	0.015	29.16	0.048
29	0.023	5.6	-0.019	31.36	0.040
30	0.018	5.8	-0.052	33.64	0.031
31	0.015	6.0	-0.082	36.00	0.019
32	0.011				
33	0.008				
34	0.004				
35	0.000				

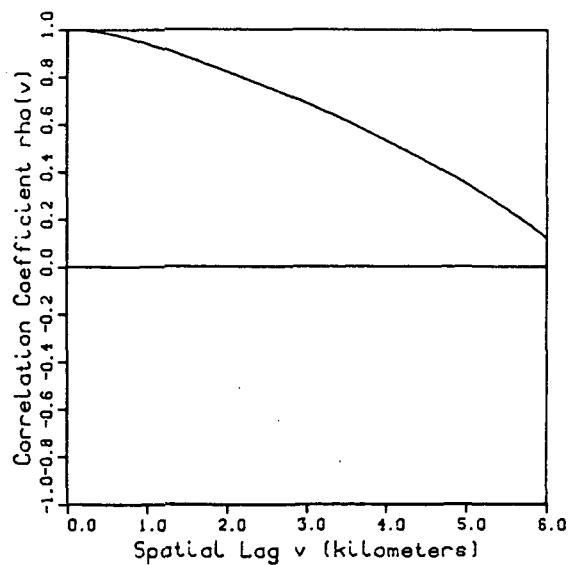
Walnut Gulch, Arizona

Ac=154.21 sq.km.

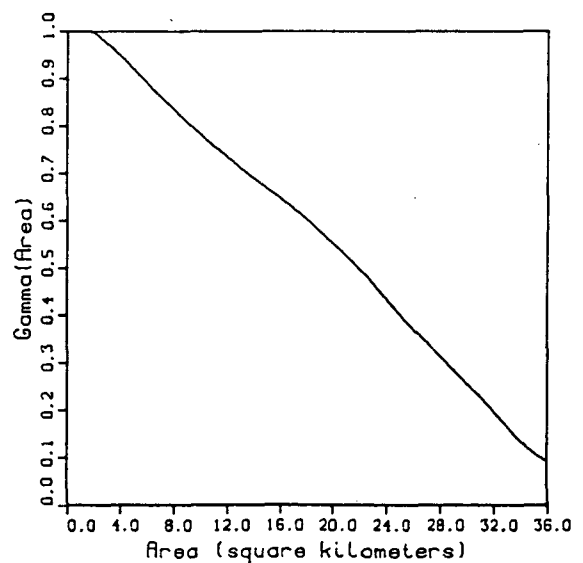
Storm Day
July 14, 1974



Spatial Correlation



Variance Function



Storm Day July 14 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 8.246$

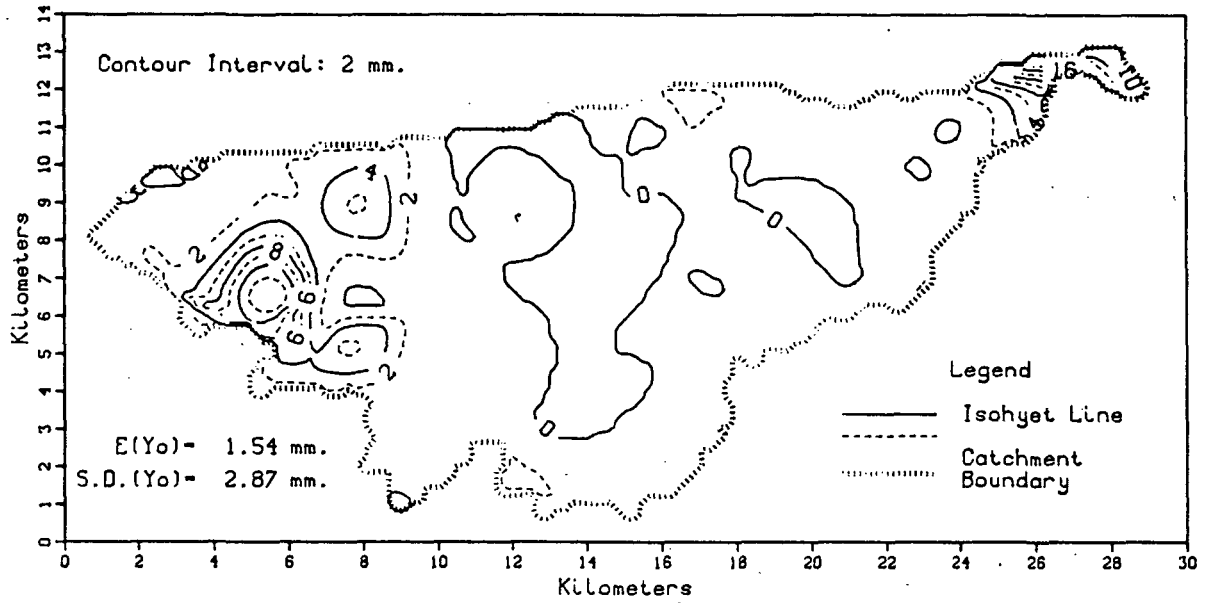
Variance of Point Depth (mm. sq.): $Var(Y) = 27.744$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.683$

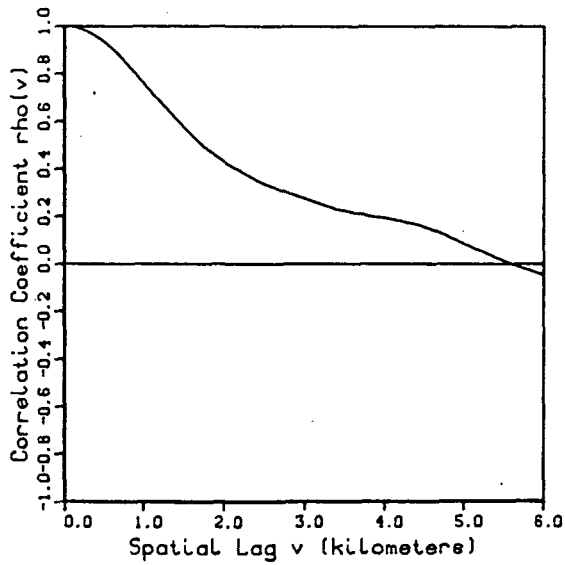
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
2	0.979	0.2	0.997	0.04	1.012
3	0.814	0.4	0.988	0.16	1.020
4	0.695	0.6	0.974	0.36	1.022
5	0.612	0.8	0.956	0.64	1.020
6	0.545	1.0	0.936	1.00	1.015
7	0.496	1.2	0.914	1.44	1.007
8	0.457	1.4	0.890	1.96	0.996
9	0.399	1.6	0.866	2.56	0.982
10	0.362	1.8	0.841	3.24	0.966
11	0.319	2.0	0.816	4.00	0.946
12	0.262	2.2	0.791	4.84	0.922
13	0.208	2.4	0.765	5.76	0.895
14	0.157	2.6	0.739	6.76	0.867
15	0.121	2.8	0.713	7.84	0.837
16	0.096	3.0	0.685	9.00	0.806
17	0.076	3.2	0.655	10.24	0.775
18	0.059	3.4	0.625	11.56	0.744
19	0.040	3.6	0.594	12.96	0.712
20	0.026	3.8	0.562	14.44	0.680
21	0.013	4.0	0.529	16.00	0.645
22	0.008	4.2	0.495	17.64	0.608
23	0.003	4.4	0.460	19.36	0.566
24	0.000	4.6	0.424	21.16	0.519
		4.8	0.387	23.04	0.463
		5.0	0.349	25.00	0.398
		5.2	0.307	27.04	0.340
		5.4	0.263	29.16	0.276
		5.6	0.218	31.36	0.216
		5.8	0.170	33.64	0.143
		6.0	0.118	36.00	0.092

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

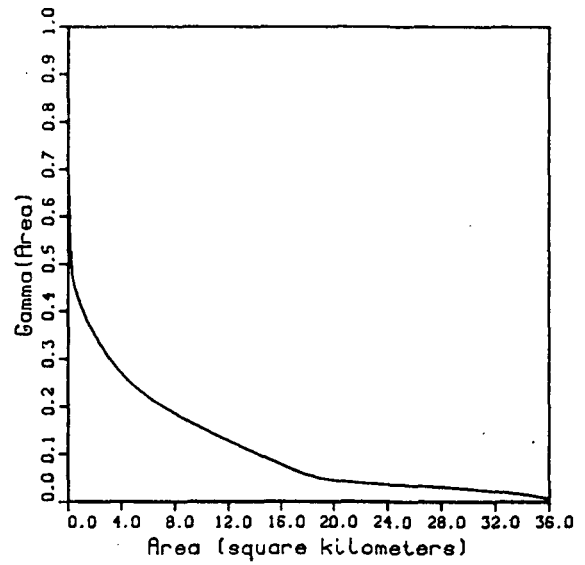
Storm Day
 July 15, 1974



Spatial Correlation



Variance Function



Storm Day July 15 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.158$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.842$

Expected Value of Point Depth (mm.): $E(Y) = 1.673$

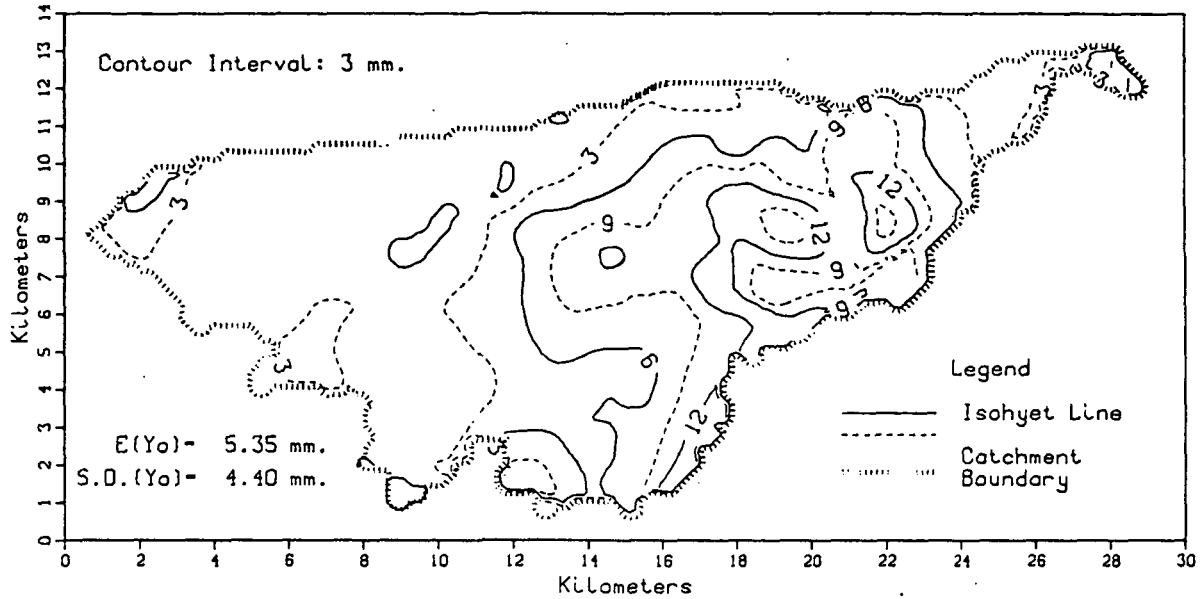
Variance of Point Depth (mm. sq.): $Var(Y) = 9.931$

Coef. of Skewness of Point Depth: $S.C.(Y) = 4.386$

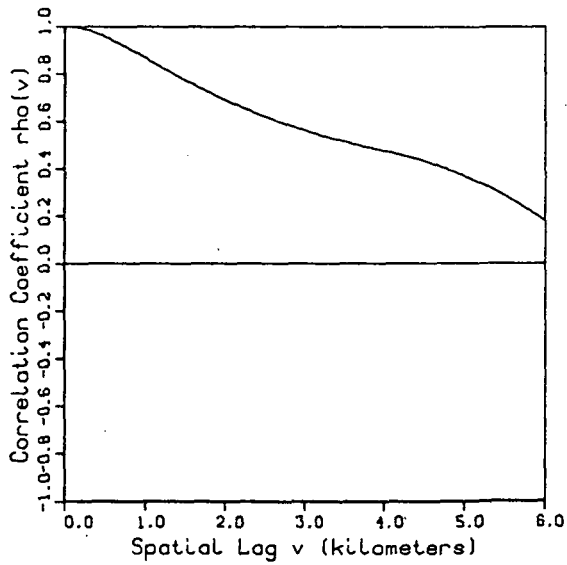
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.415	0.0	1.000	0.00	1.000
2	0.185	0.2	0.989	0.04	0.776
3	0.134	0.4	0.956	0.16	0.576
4	0.100	0.6	0.904	0.36	0.472
5	0.074	0.8	0.837	0.64	0.442
6	0.053	1.0	0.758	1.00	0.412
7	0.044	1.2	0.682	1.44	0.380
8	0.039	1.4	0.609	1.96	0.351
9	0.034	1.6	0.539	2.56	0.322
10	0.030	1.8	0.478	3.24	0.294
11	0.026	2.0	0.428	4.00	0.268
12	0.021	2.2	0.389	4.84	0.245
13	0.017	2.4	0.350	5.76	0.224
14	0.013	2.6	0.320	6.76	0.205
15	0.010	2.8	0.296	7.84	0.186
16	0.008	3.0	0.272	9.00	0.168
17	0.008	3.2	0.249	10.24	0.150
18	0.007	3.4	0.227	11.56	0.132
19	0.007	3.6	0.213	12.96	0.115
20	0.006	3.8	0.199	14.44	0.097
21	0.006	4.0	0.189	16.00	0.077
22	0.005	4.2	0.177	17.64	0.058
23	0.004	4.4	0.162	19.36	0.046
24	0.003	4.6	0.141	21.16	0.041
25	0.002	4.8	0.113	23.04	0.036
26	0.001	5.0	0.083	25.00	0.034
27	0.001	5.2	0.053	27.04	0.031
28	0.000	5.4	0.024	29.16	0.027
29	0.000	5.6	-.003	31.36	0.022
		5.8	-.027	33.64	0.016
		6.0	-.049	36.00	0.006

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq. km.}$

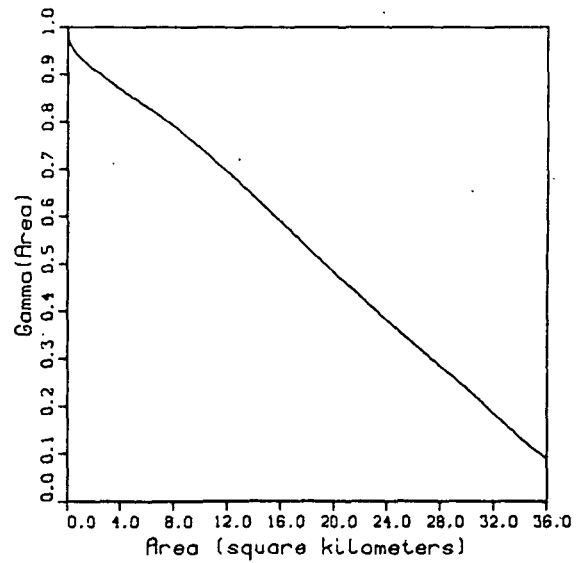
Storm Day
 July 16, 1974



Spatial Correlation



Variance Function



Storm Day July 16 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.009$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.991$

Expected Value of Point Depth (mm.): $E(Y) = 5.585$

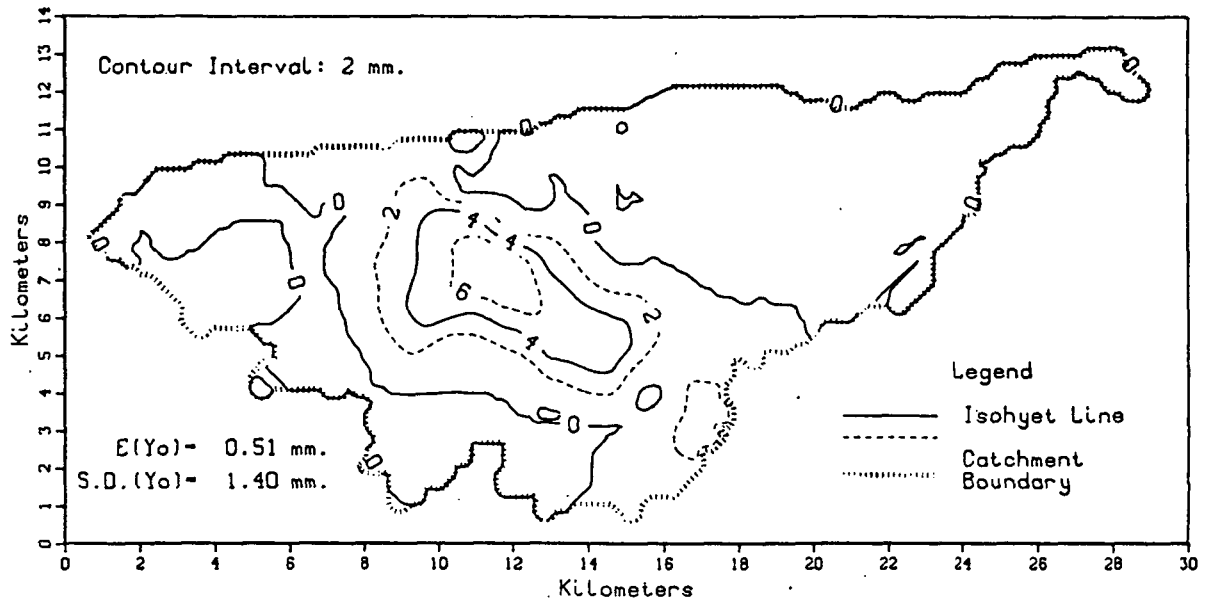
Variance of Point Depth (mm. sq.): $Var(Y) = 16.026$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.509$

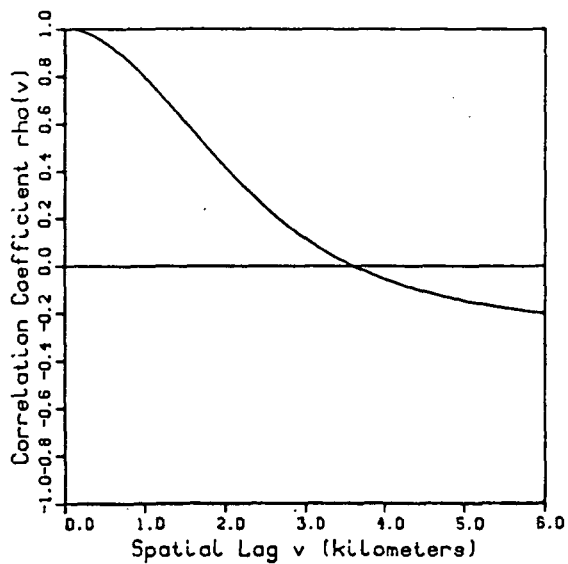
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.905	0.0	1.000	0.00	1.000
2	0.766	0.2	0.991	0.04	0.983
3	0.630	0.4	0.969	0.16	0.968
4	0.553	0.6	0.938	0.36	0.956
5	0.497	0.8	0.903	0.64	0.945
6	0.421	1.0	0.865	1.00	0.934
7	0.356	1.2	0.826	1.44	0.923
8	0.300	1.4	0.789	1.96	0.910
9	0.241	1.6	0.753	2.56	0.897
10	0.179	1.8	0.720	3.24	0.883
11	0.124	2.0	0.688	4.00	0.867
12	0.076	2.2	0.659	4.84	0.851
13	0.037	2.4	0.631	5.76	0.834
14	0.018	2.6	0.606	6.76	0.815
15	0.008	2.8	0.582	7.84	0.793
16	0.001	3.0	0.560	9.00	0.767
17	0.000	3.2	0.540	10.24	0.738
		3.4	0.521	11.56	0.705
		3.6	0.504	12.96	0.669
		3.8	0.488	14.44	0.630
		4.0	0.474	16.00	0.588
		4.2	0.458	17.64	0.542
		4.4	0.441	19.36	0.497
		4.6	0.420	21.16	0.452
		4.8	0.395	23.04	0.404
		5.0	0.367	25.00	0.354
		5.2	0.336	27.04	0.306
		5.4	0.303	29.16	0.255
		5.6	0.265	31.36	0.202
		5.8	0.223	33.64	0.141
		6.0	0.177	36.00	0.091

Walnut Gulch, Arizona
Ac=154.21 sq.km.

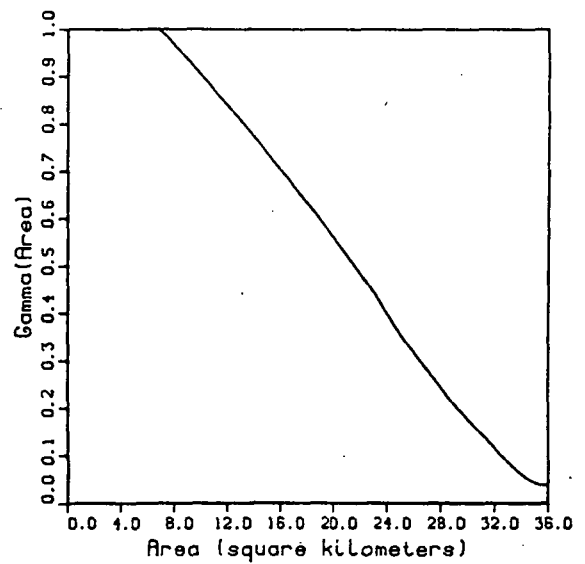
Storm Day
July 17, 1974



Spatial Correlation



Variance Function



Storm Day July 17 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.503$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.497$

Expected Value of Point Depth (mm.): $E(Y) = 0.819$

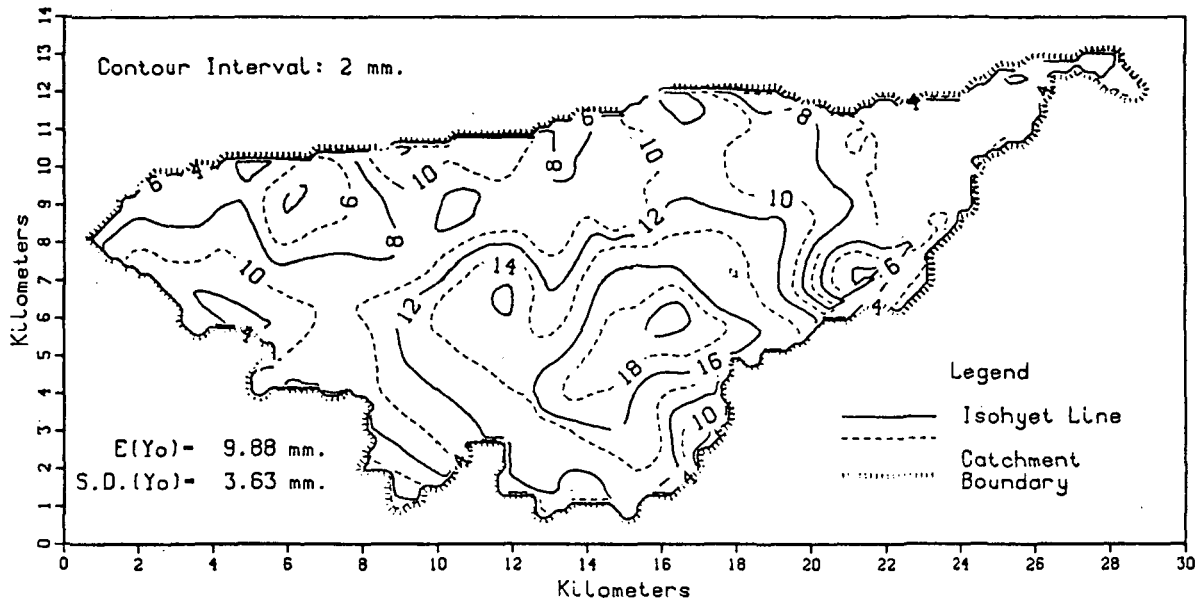
Variance of Point Depth (mm. sq.): $Var(Y) = 2.553$

Coef. of Skewness of Point Depth: $S.C.(Y) = 2.242$

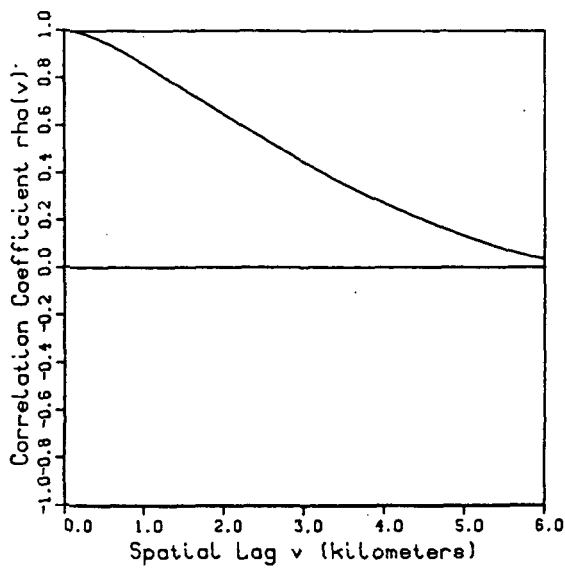
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.231	0.0	1.000	0.00	1.000
2	0.162	0.2	0.990	0.04	1.033
3	0.113	0.4	0.961	0.16	1.062
4	0.080	0.6	0.916	0.36	1.083
5	0.048	0.8	0.858	0.64	1.096
6	0.021	1.0	0.791	1.00	1.105
7	0.008	1.2	0.718	1.44	1.109
8	0.000	1.4	0.641	1.96	1.109
		1.6	0.563	2.56	1.103
		1.8	0.486	3.24	1.091
		2.0	0.412	4.00	1.075
		2.2	0.342	4.84	1.055
		2.4	0.276	5.76	1.031
		2.6	0.215	6.76	1.002
		2.8	0.161	7.84	0.970
		3.0	0.112	9.00	0.934
		3.2	0.069	10.24	0.895
		3.4	0.031	11.56	0.852
		3.6	-0.002	12.96	0.806
		3.8	-0.032	14.44	0.756
		4.0	-0.058	16.00	0.702
		4.2	-0.081	17.64	0.643
		4.4	-0.102	19.36	0.582
		4.6	-0.121	21.16	0.515
		4.8	-0.137	23.04	0.440
		5.0	-0.151	25.00	0.353
		5.2	-0.163	27.04	0.277
		5.4	-0.175	29.16	0.200
		5.6	-0.185	31.36	0.136
		5.8	-0.195	33.64	0.067
		6.0	-0.204	36.00	0.037

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

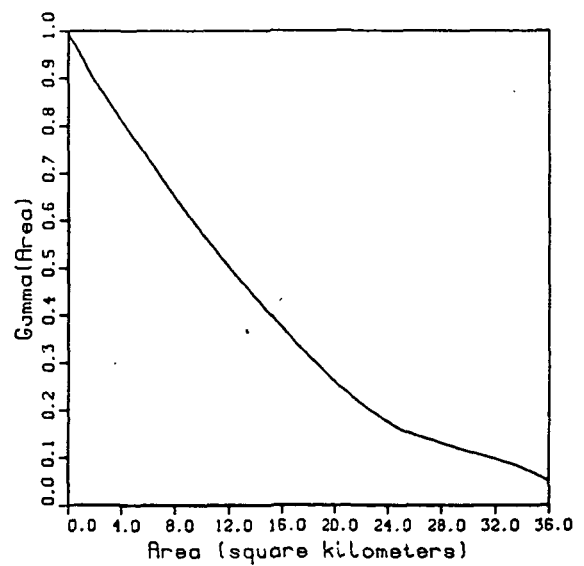
Storm Day
 July 18, 1974



Spatial Correlation



Variance Function



Storm Day July 18 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.001$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.999$

Expected Value of Point Depth (mm.): $E(Y) = 10.433$

Variance of Point Depth (mm. sq.): $Var(Y) = 14.517$

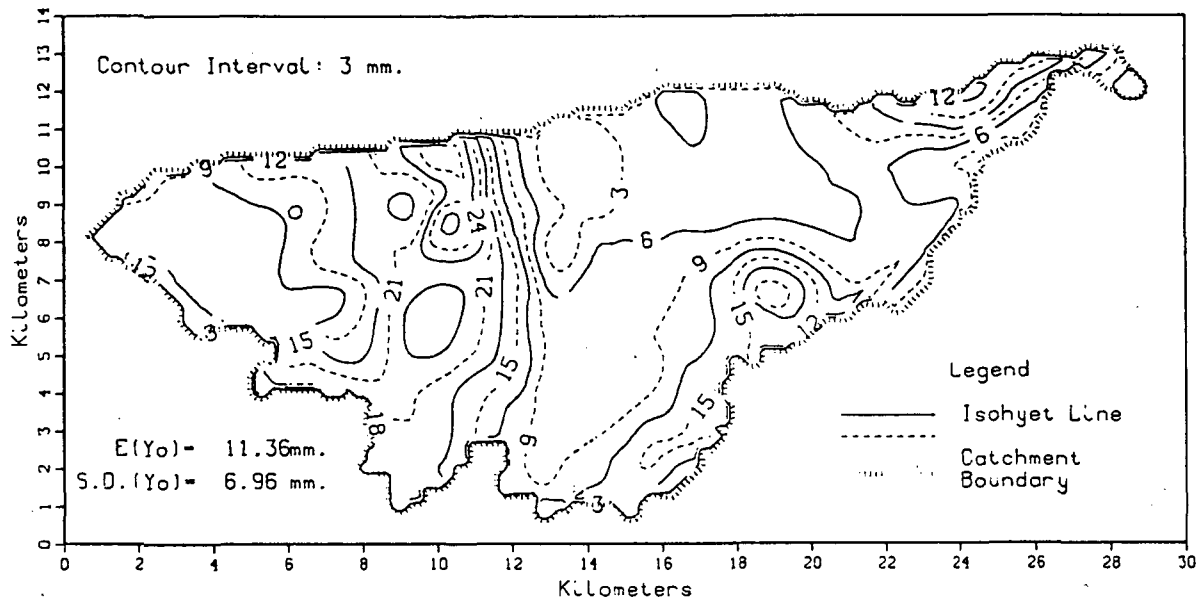
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.247$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.996	0.0	1.000	0.00	1.000
2	0.993	0.2	0.989	0.04	0.994
3	0.989	0.4	0.964	0.16	0.984
4	0.981	0.6	0.932	0.36	0.975
5	0.935	0.8	0.895	0.64	0.963
6	0.863	1.0	0.854	1.00	0.945
7	0.816	1.2	0.812	1.44	0.921
8	0.748	1.4	0.769	1.96	0.894
9	0.637	1.6	0.726	2.56	0.868
10	0.510	1.8	0.684	3.24	0.840
11	0.412	2.0	0.642	4.00	0.809
12	0.332	2.2	0.602	4.84	0.776
13	0.256	2.4	0.562	5.76	0.739
14	0.199	2.6	0.522	6.76	0.697
15	0.134	2.8	0.483	7.84	0.653
16	0.089	3.0	0.443	9.00	0.608
17	0.062	3.2	0.405	10.24	0.562
18	0.037	3.4	0.368	11.56	0.515
19	0.014	3.6	0.333	12.96	0.468
20	0.005	3.8	0.300	14.44	0.420
21	0.000	4.0	0.270	16.00	0.371
		4.2	0.240	17.64	0.321
		4.4	0.211	19.36	0.273
		4.6	0.183	21.16	0.231
		4.8	0.156	23.04	0.191
		5.0	0.131	25.00	0.158
		5.2	0.107	27.04	0.138
		5.4	0.085	29.16	0.119
		5.6	0.065	31.36	0.101
		5.8	0.049	33.64	0.081
		6.0	0.036	36.00	0.050

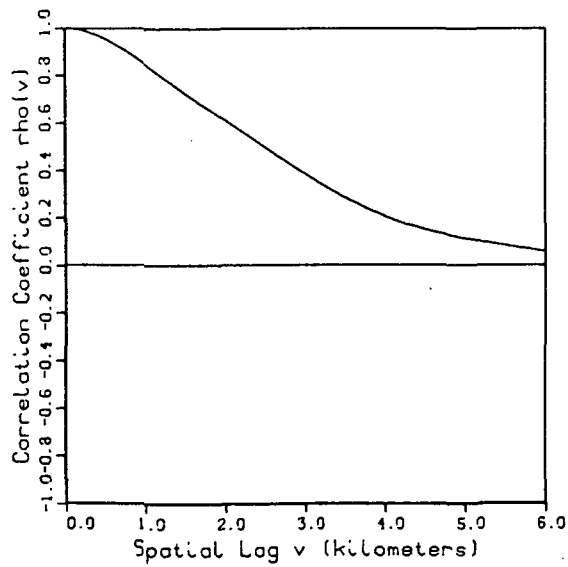
Walnut Gulch, Arizona

Ac=154.21 sq.km.

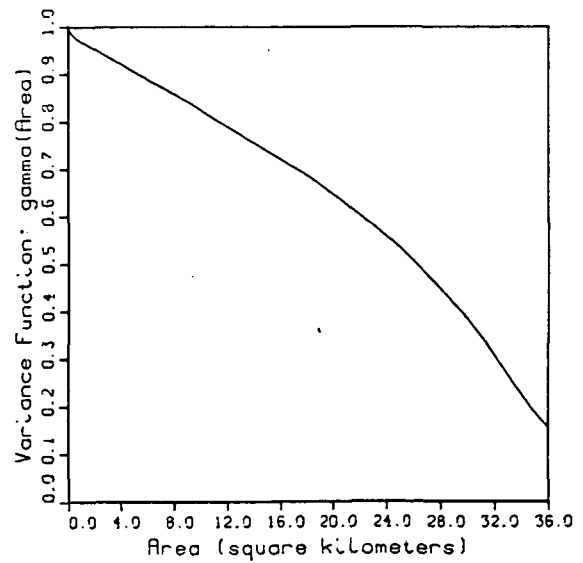
Storm Day
July 19, 1974



Spatial Correlation



Variance Function



Storm Day July 19 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c) \approx 0.001$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c) \approx 0.999$

Expected Value of Point Depth (mm.): $E(Y) = 11.782$

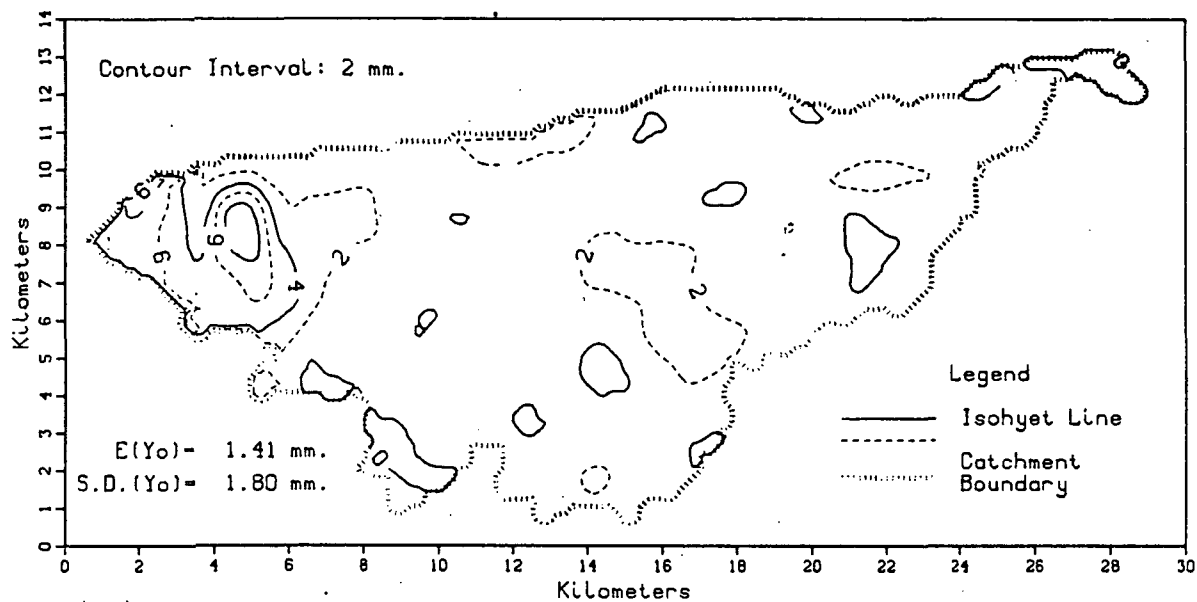
Variance of Point Depth (mm. sq.): $Var(Y) = 39.378$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.570$

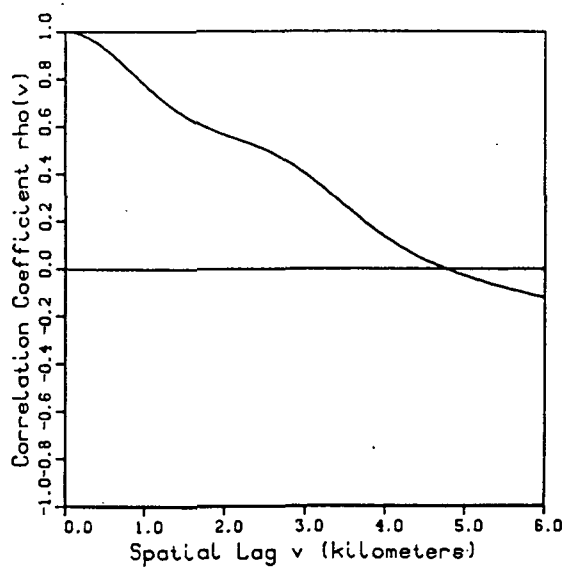
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho(v)		Variance Function A (km.sq.) Gamma(A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.996	0.0	1.000	0.00	1.000
2	0.984	0.2	0.991	0.04	0.995
3	0.958	0.4	0.968	0.16	0.988
4	0.930	0.6	0.934	0.36	0.980
5	0.869	0.8	0.891	0.64	0.973
6	0.799	1.0	0.844	1.00	0.967
7	0.741	1.2	0.794	1.44	0.960
8	0.666	1.4	0.745	1.96	0.952
9	0.595	1.6	0.698	2.56	0.942
10	0.536	1.8	0.653	3.24	0.931
11	0.479	2.0	0.609	4.00	0.919
12	0.409	2.2	0.562	4.84	0.905
13	0.363	2.4	0.516	5.76	0.890
14	0.324	2.6	0.470	6.76	0.875
15	0.284	2.8	0.425	7.84	0.858
16	0.248	3.0	0.382	9.00	0.839
17	0.220	3.2	0.340	10.24	0.818
18	0.192	3.4	0.301	11.56	0.795
19	0.162	3.6	0.266	12.96	0.771
20	0.130	3.8	0.234	14.44	0.746
21	0.101	4.0	0.205	16.00	0.719
22	0.074	4.2	0.180	17.64	0.691
23	0.055	4.4	0.159	19.36	0.658
24	0.041	4.6	0.141	21.16	0.620
25	0.030	4.8	0.125	23.04	0.577
26	0.018	5.0	0.112	25.00	0.530
27	0.012	5.2	0.099	27.04	0.473
28	0.008	5.4	0.088	29.16	0.408
29	0.004	5.6	0.077	31.36	0.332
30	0.001	5.8	0.067	33.64	0.238
31	0.000	6.0	0.057	36.00	0.153

Walnut Gulch, Arizona
Ac=154.21 sq.km.

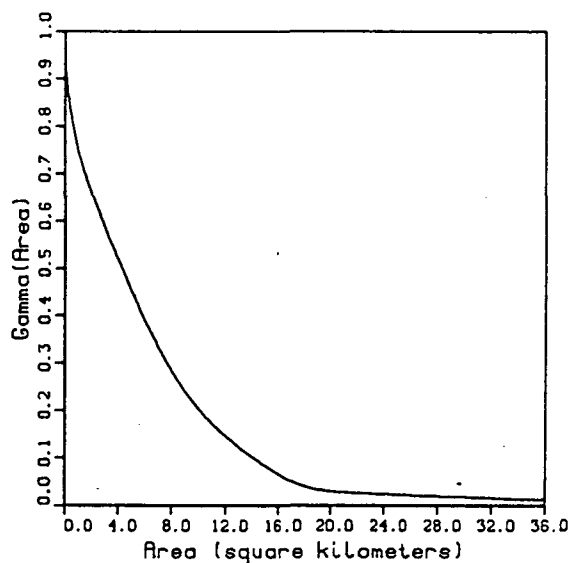
Storm Day
July 20, 1974



Spatial Correlation



Variance Function



Storm Day July 20 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.042$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.958$

Expected Value of Point Depth (mm.): $E(Y) = 1.439$

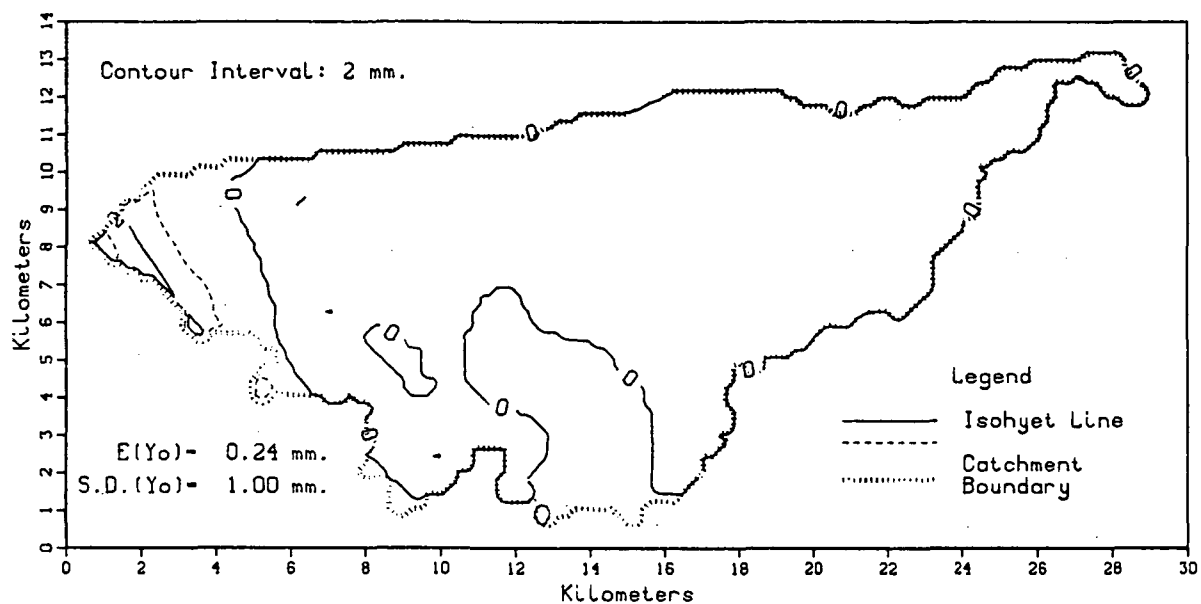
Variance of Point Depth (mm. sq.): $Var(Y) = 2.839$

Coef. of Skewness of Point Depth: $S.C.(Y) = 2.242$

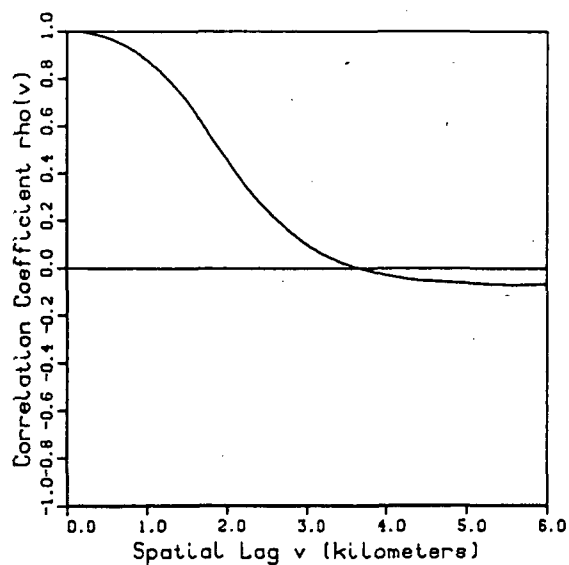
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.449	0.0	1.000	0.00	1.000
2	0.213	0.2	0.986	0.04	0.947
3	0.113	0.4	0.950	0.16	0.897
4	0.083	0.6	0.899	0.36	0.847
5	0.059	0.8	0.837	0.64	0.798
6	0.039	1.0	0.774	1.00	0.749
7	0.024	1.2	0.715	1.44	0.704
8	0.010	1.4	0.664	1.96	0.662
9	0.002	1.6	0.621	2.56	0.616
10	0.000	1.8	0.587	3.24	0.566
		2.0	0.561	4.00	0.516
		2.2	0.538	4.84	0.459
		2.4	0.513	5.76	0.401
		2.6	0.482	6.76	0.344
		2.8	0.444	7.84	0.288
		3.0	0.398	9.00	0.238
		3.2	0.345	10.24	0.194
		3.4	0.289	11.56	0.156
		3.6	0.233	12.96	0.123
		3.8	0.178	14.44	0.093
		4.0	0.130	16.00	0.065
		4.2	0.087	17.64	0.042
		4.4	0.048	19.36	0.031
		4.6	0.018	21.16	0.027
		4.8	-0.008	23.04	0.024
		5.0	-0.033	25.00	0.022
		5.2	-0.055	27.04	0.020
		5.4	-0.076	29.16	0.018
		5.6	-0.094	31.36	0.015
		5.8	-0.110	33.64	0.013
		6.0	-0.125	36.00	0.011

Walnut Gulch, Arizona
Ac=154.21 sq.km.

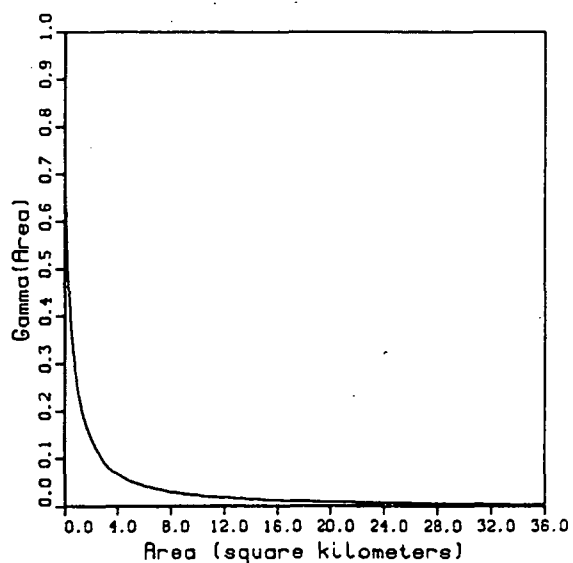
Storm Day
July 21, 1974



Spatial Correlation



Variance Function



Storm Day July 21 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.772$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.228$

Expected Value of Point Depth (mm.): $E(Y) = 0.187$

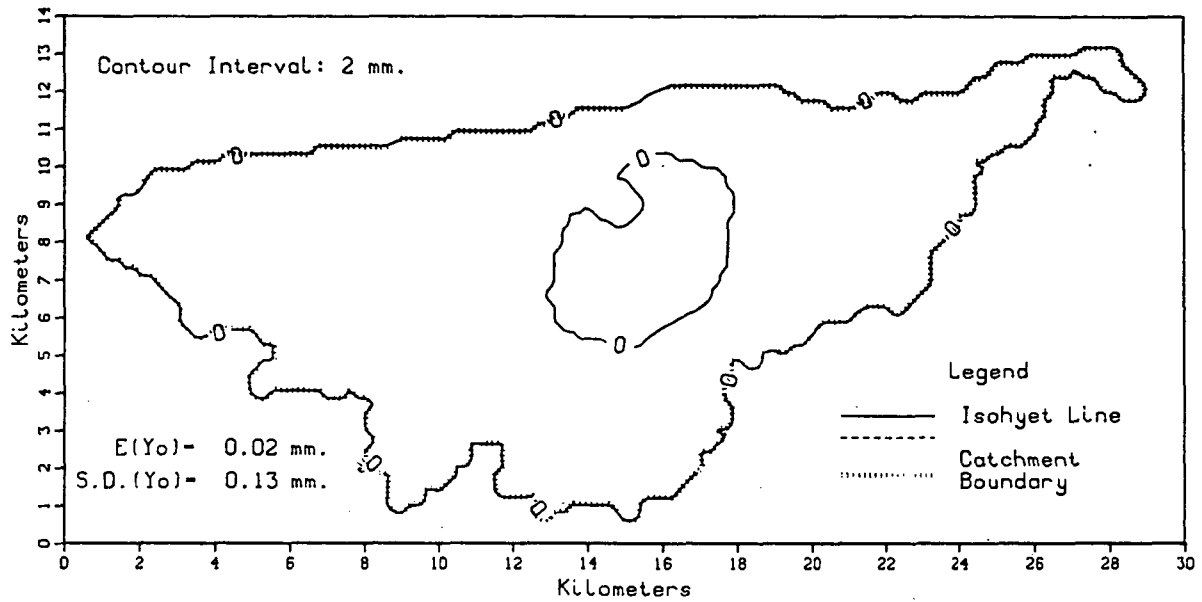
Variance of Point Depth (mm. sq.): $Var(Y) = 0.470$

Coef. of Skewness of Point Depth: $S.C.(Y) = 5.418$

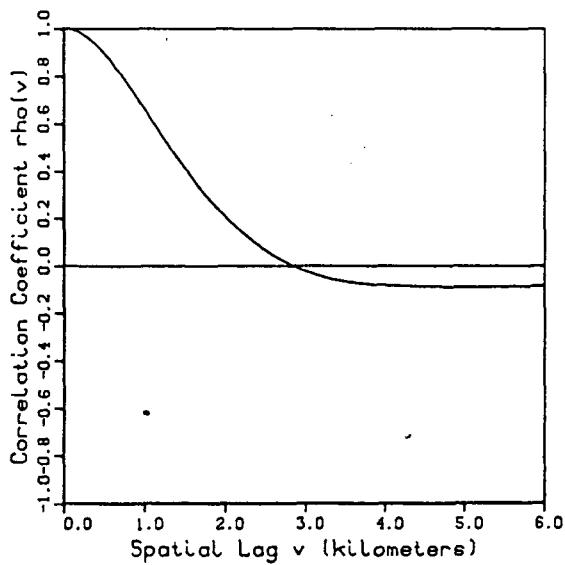
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.050	0.0	1.000	0.00	1.000
2	0.027	0.2	0.995	0.04	0.766
3	0.016	0.4	0.981	0.16	0.585
4	0.008	0.6	0.957	0.36	0.442
5	0.004	0.8	0.922	0.64	0.338
6	0.001	1.0	0.875	1.00	0.250
7	0.000	1.2	0.814	1.44	0.189
		1.4	0.740	1.96	0.147
		1.6	0.651	2.56	0.112
		1.8	0.549	3.24	0.083
		2.0	0.453	4.00	0.067
		2.2	0.360	4.84	0.053
		2.4	0.279	5.76	0.044
		2.6	0.211	6.76	0.037
		2.8	0.149	7.84	0.030
		3.0	0.099	9.00	0.025
		3.2	0.058	10.24	0.021
		3.4	0.027	11.56	0.018
		3.6	0.002	12.96	0.016
		3.8	-0.017	14.44	0.013
		4.0	-0.033	16.00	0.011
		4.2	-0.045	17.64	0.010
		4.4	-0.054	19.36	0.008
		4.6	-0.058	21.16	0.007
		4.8	-0.062	23.04	0.006
		5.0	-0.066	25.00	0.006
		5.2	-0.070	27.04	0.005
		5.4	-0.073	29.16	0.004
		5.6	-0.074	31.36	0.003
		5.8	-0.072	33.64	0.002
		6.0	-0.068	36.00	0.001

Walnut Gulch, Arizona
Ac=154.21 sq.km.

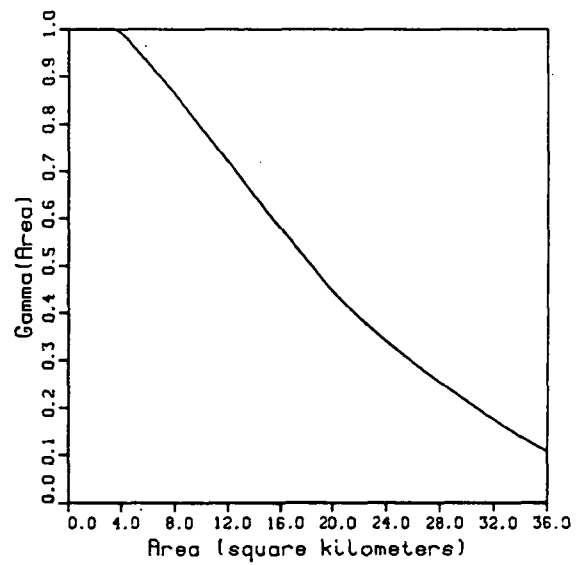
Storm Day
July 23, 1974



Spatial Correlation



Variance Function



Storm Day July 23 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.879$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.121$

Expected Value of Point Depth (mm.): $E(Y) = 0.033$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.017$

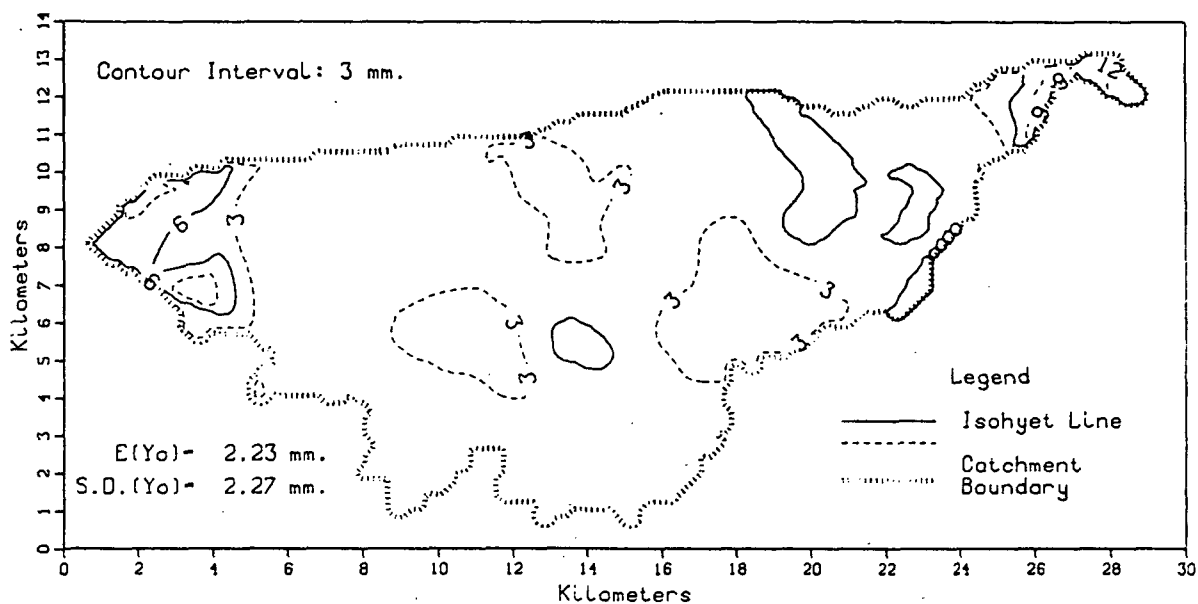
Coef. of Skewness of Point Depth: $S.C.(Y) = 4.819$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.000	0.0	1.000	0.00	1.000
2	0.000	0.2	0.981	0.04	1.037
		0.4	0.929	0.16	1.065
		0.6	0.852	0.36	1.081
		0.8	0.758	0.64	1.085
		1.0	0.656	1.00	1.082
		1.2	0.553	1.44	1.074
		1.4	0.453	1.96	1.060
		1.6	0.361	2.56	1.040
		1.8	0.277	3.24	1.016
		2.0	0.204	4.00	0.991
		2.2	0.140	4.84	0.963
		2.4	0.086	5.76	0.933
		2.6	0.041	6.76	0.900
		2.8	0.004	7.84	0.864
		3.0	-.026	9.00	0.824
		3.2	-.048	10.24	0.781
		3.4	-.064	11.56	0.734
		3.6	-.075	12.96	0.684
		3.8	-.081	14.44	0.631
		4.0	-.086	16.00	0.577
		4.2	-.088	17.64	0.521
		4.4	-.090	19.36	0.465
		4.6	-.092	21.16	0.411
		4.8	-.093	23.04	0.362
		5.0	-.093	25.00	0.317
		5.2	-.093	27.04	0.273
		5.4	-.092	29.16	0.230
		5.6	-.090	31.36	0.187
		5.8	-.089	33.64	0.145
		6.0	-.088	36.00	0.108

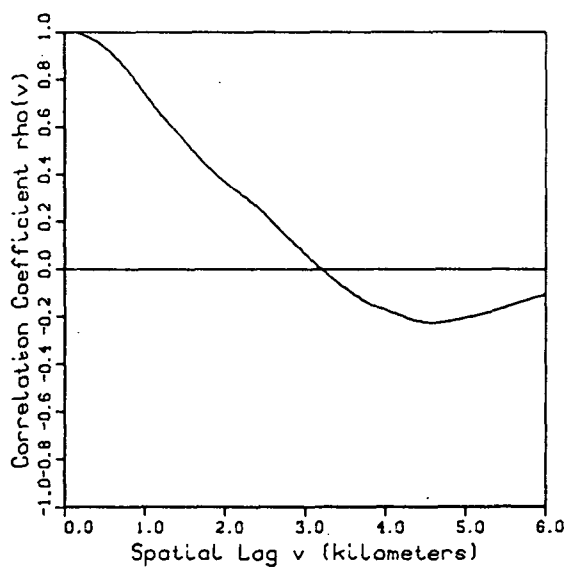
Walnut Gulch, Arizona

Ac=154.21 sq.km.

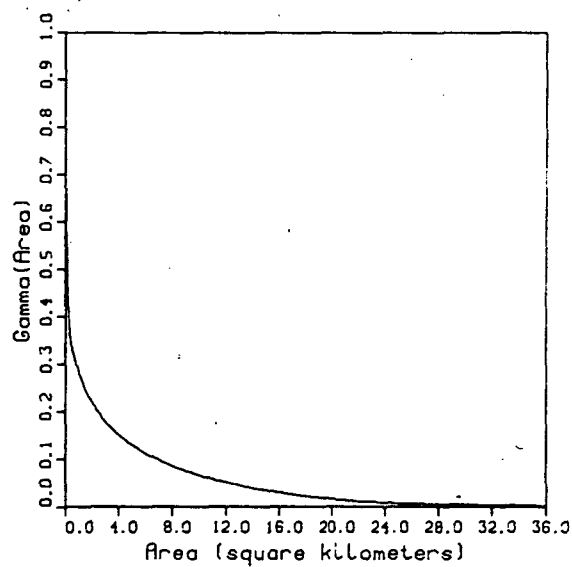
Storm Day
July 26, 1974



Spatial Correlation



Variance Function



Storm Day July 26 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.049$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.951$

Expected Value of Point Depth (mm.): $E(Y) = 2.397$

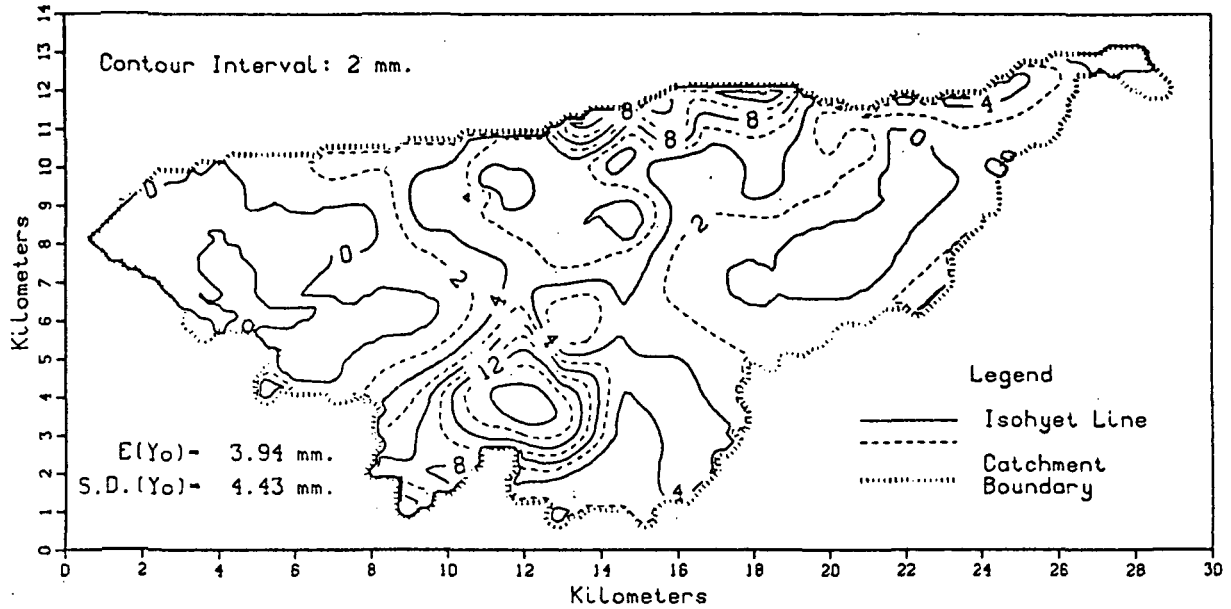
Variance of Point Depth (mm. sq.): $Var(Y) = 7.638$

Coef. of Skewness of Point Depth: $S.C.(Y) = 4.962$

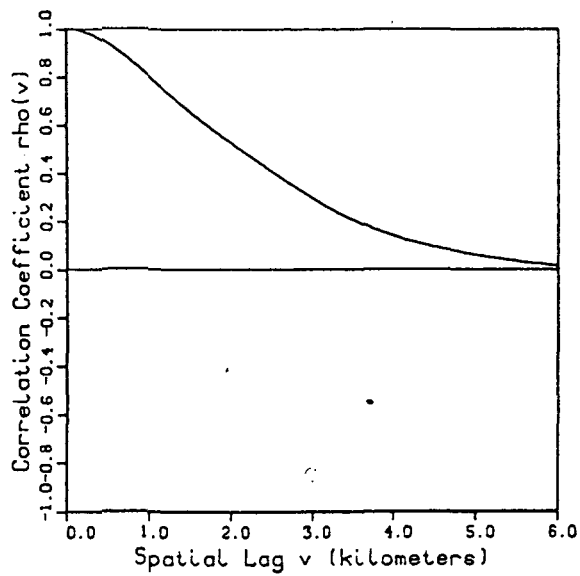
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.745	0.0	1.000	0.00	1.000
2	0.430	0.2	0.990	0.04	0.728
3	0.254	0.4	0.958	0.16	0.478
4	0.142	0.6	0.904	0.36	0.359
5	0.079	0.8	0.830	0.64	0.320
6	0.057	1.0	0.736	1.00	0.283
7	0.044	1.2	0.652	1.44	0.249
8	0.030	1.4	0.574	1.96	0.221
9	0.017	1.6	0.497	2.56	0.195
10	0.010	1.8	0.425	3.24	0.170
11	0.007	2.0	0.365	4.00	0.150
12	0.006	2.2	0.313	4.84	0.131
13	0.006	2.4	0.260	5.76	0.114
14	0.006	2.6	0.194	6.76	0.100
15	0.006	2.8	0.128	7.84	0.086
16	0.006	3.0	0.062	9.00	0.074
17	0.006	3.2	0.000	10.24	0.063
18	0.005	3.4	-0.057	11.56	0.053
19	0.005	3.6	-0.106	12.96	0.044
20	0.005	3.8	-0.148	14.44	0.036
21	0.004	4.0	-0.175	16.00	0.029
22	0.004	4.2	-0.200	17.64	0.022
23	0.004	4.4	-0.223	19.36	0.017
24	0.003	4.6	-0.229	21.16	0.012
25	0.003	4.8	-0.218	23.04	0.009
26	0.002	5.0	-0.204	25.00	0.006
27	0.002	5.2	-0.188	27.04	0.005
28	0.002	5.4	-0.169	29.16	0.004
29	0.002	5.6	-0.148	31.36	0.003
30	0.001	5.8	-0.126	33.64	0.002
31	0.001	6.0	-0.105	36.00	0.001
32	0.001				
33	0.000				
34	0.000				
35	0.000				
36	0.000				

Walnut Gulch, Arizona
Ac=154.21 sq.km.

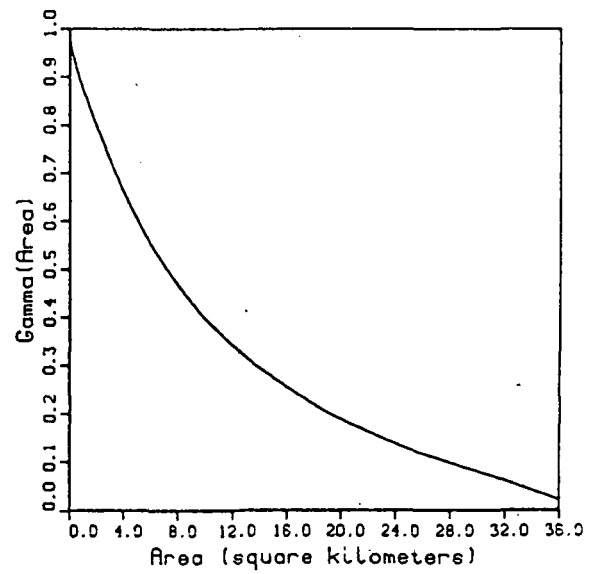
Storm Day
July 27, 1974



Spatial Correlation



Variance Function



Storm Day July 27 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.171$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.829$

Expected Value of Point Depth (mm.): $E(Y) = 3.507$

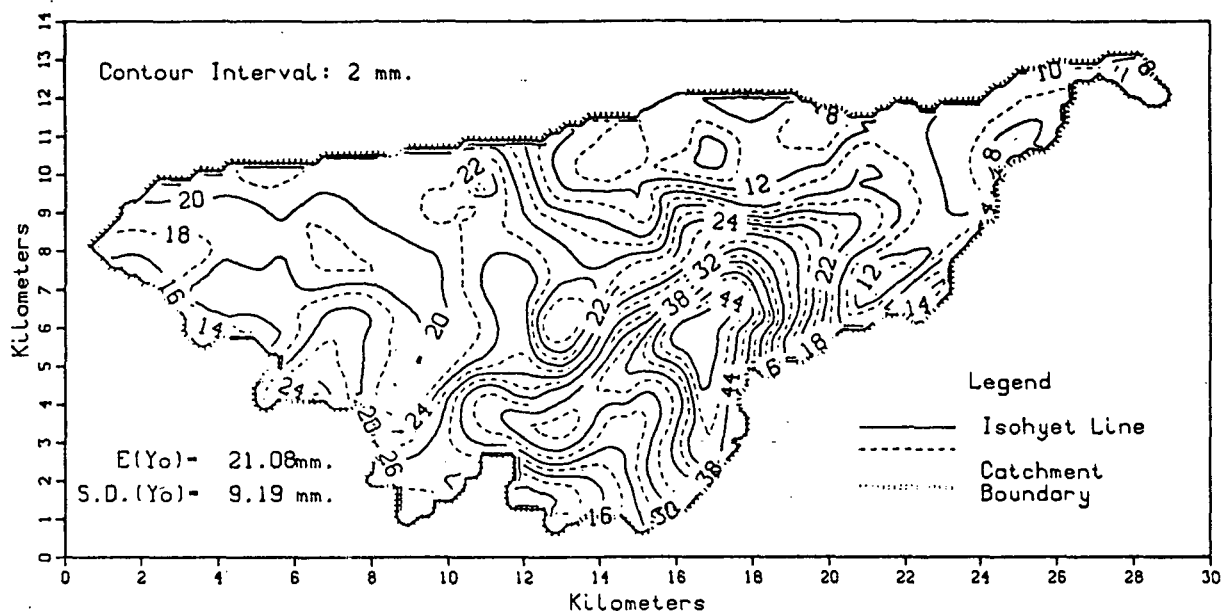
Variance of Point Depth (mm. sq.): $Var(Y) = 14.548$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.338$

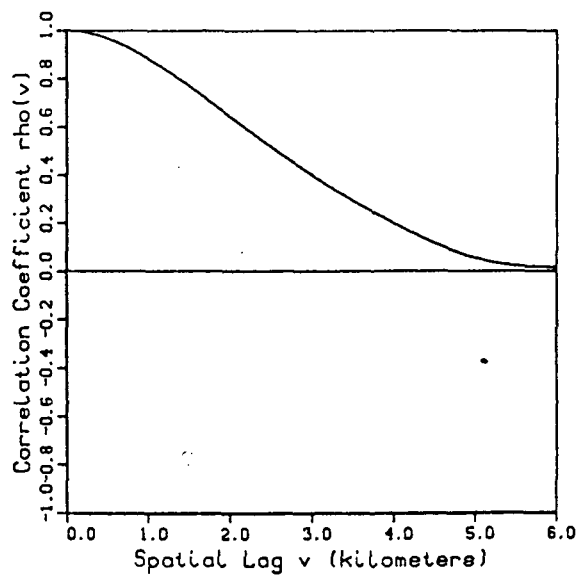
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.639	0.0	1.000	0.00	1.000
2	0.552	0.2	0.988	0.04	0.980
3	0.449	0.4	0.958	0.16	0.958
4	0.353	0.6	0.913	0.36	0.934
5	0.257	0.8	0.859	0.64	0.905
6	0.208	1.0	0.800	1.00	0.873
7	0.169	1.2	0.740	1.44	0.839
8	0.122	1.4	0.682	1.96	0.799
9	0.090	1.6	0.626	2.56	0.755
10	0.072	1.8	0.574	3.24	0.708
11	0.057	2.0	0.525	4.00	0.659
12	0.045	2.2	0.477	4.84	0.610
13	0.036	2.4	0.431	5.76	0.562
14	0.027	2.6	0.385	6.76	0.516
15	0.018	2.8	0.340	7.84	0.472
16	0.010	3.0	0.296	9.00	0.429
17	0.000	3.2	0.256	10.24	0.390
18	0.000	3.4	0.220	11.56	0.352
		3.6	0.189	12.96	0.318
		3.8	0.162	14.44	0.286
		4.0	0.138	16.00	0.254
		4.2	0.118	17.64	0.224
		4.4	0.100	19.36	0.196
		4.6	0.085	21.16	0.173
		4.8	0.072	23.04	0.149
		5.0	0.060	25.00	0.126
		5.2	0.049	27.04	0.107
		5.4	0.039	29.16	0.087
		5.6	0.029	31.36	0.068
		5.8	0.022	33.64	0.044
		6.0	0.016	36.00	0.021

Walnut Gulch, Arizona
Ac-154.21 sq.km.

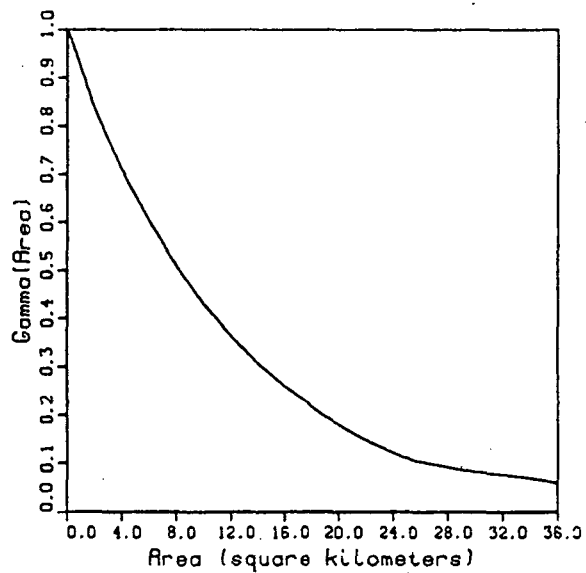
Storm Day
July 28, 1974



Spatial Correlation



Variance Function



Storm Day July 28 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 22.431$

Variance of Point Depth (mm. sq.): $Var(Y) = 89.050$

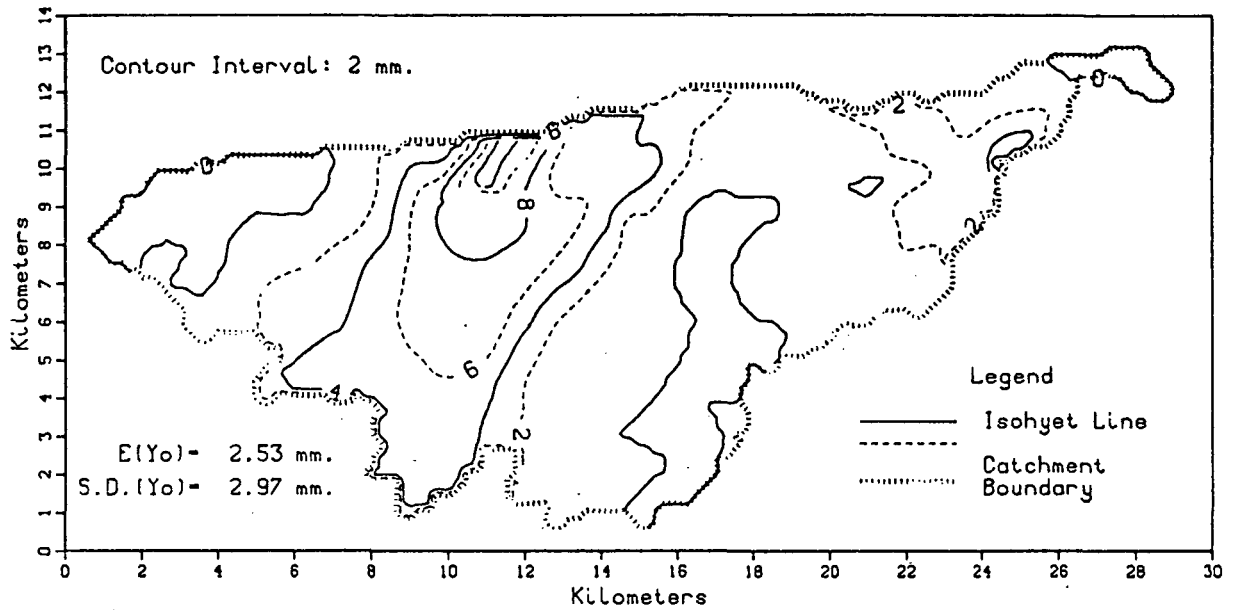
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.786$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c(Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
3	1.000	0.2	0.994	0.04	0.999
5	1.000	0.4	0.978	0.16	0.992
7	0.997	0.6	0.953	0.36	0.975
9	0.972	0.8	0.920	0.64	0.950
11	0.905	1.0	0.882	1.00	0.918
13	0.818	1.2	0.839	1.44	0.880
15	0.775	1.4	0.793	1.96	0.839
17	0.726	1.6	0.744	2.56	0.797
19	0.638	1.8	0.694	3.24	0.754
21	0.480	2.0	0.643	4.00	0.708
23	0.366	2.2	0.592	4.84	0.661
25	0.302	2.4	0.542	5.76	0.613
27	0.254	2.6	0.493	6.76	0.563
29	0.212	2.8	0.446	7.84	0.514
31	0.182	3.0	0.400	9.00	0.467
33	0.153	3.2	0.356	10.24	0.420
35	0.126	3.4	0.314	11.56	0.376
37	0.099	3.6	0.274	12.96	0.334
39	0.070	3.8	0.236	14.44	0.295
41	0.056	4.0	0.199	16.00	0.258
43	0.044	4.2	0.164	17.64	0.224
45	0.030	4.4	0.132	19.36	0.191
47	0.017	4.6	0.102	21.16	0.161
49	0.004	4.8	0.076	23.04	0.133
		5.0	0.055	25.00	0.110
		5.2	0.039	27.04	0.097
		5.4	0.028	29.16	0.085
		5.6	0.021	31.36	0.077
		5.8	0.017	33.64	0.070
		6.0	0.014	36.00	0.058

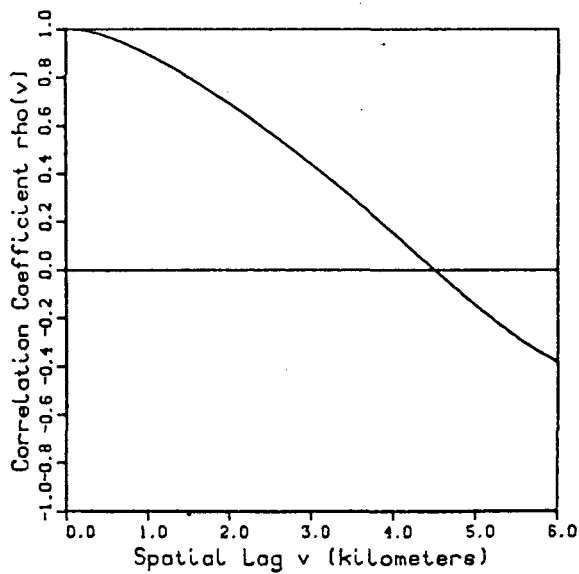
Walnut Gulch, Arizona

Ac=154.21 sq.km.

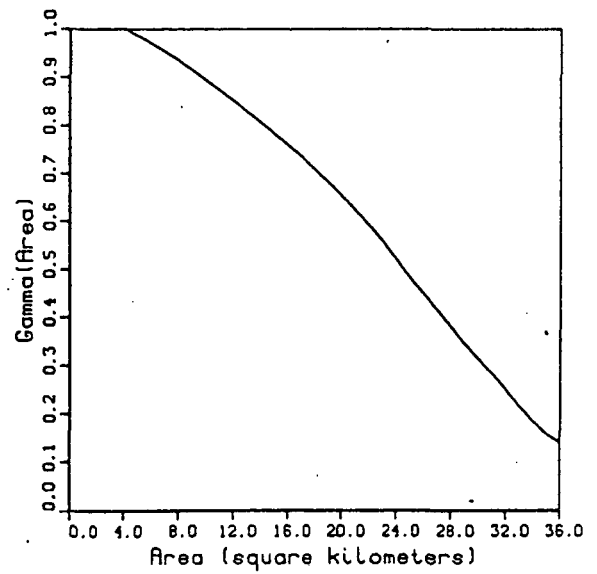
Storm Day
July 29, 1974



Spatial Correlation



Variance Function



Storm Day July 29 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.150$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.850$

Expected Value of Point Depth (mm.): $E(Y) = 2.463$

Variance of Point Depth (mm. sq.): $Var(Y) = 6.805$

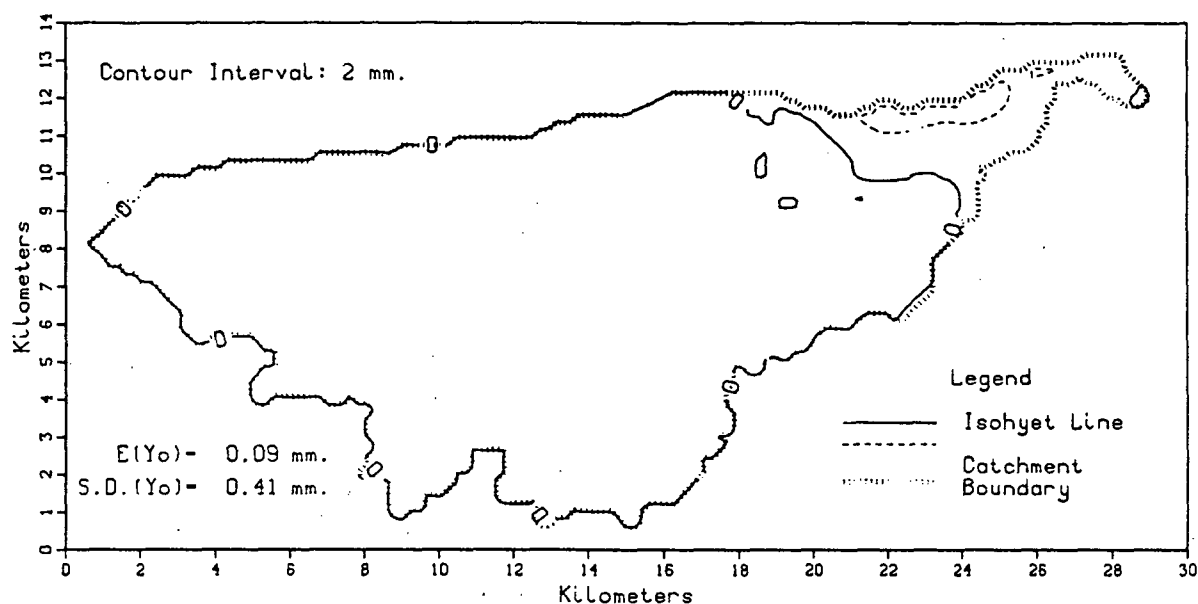
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.162$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c(Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.593	0.0	1.000	0.00	1.000
2	0.435	0.2	0.994	0.04	1.010
3	0.330	0.4	0.978	0.16	1.018
4	0.277	0.6	0.954	0.36	1.023
5	0.166	0.8	0.925	0.64	1.025
6	0.122	1.0	0.891	1.00	1.026
7	0.086	1.2	0.855	1.44	1.025
8	0.039	1.4	0.817	1.96	1.023
9	0.018	1.6	0.776	2.56	1.017
10	0.011	1.8	0.733	3.24	1.009
11	0.007	2.0	0.688	4.00	0.999
12	0.004	2.2	0.641	4.84	0.986
13	0.000	2.4	0.592	5.76	0.972
		2.6	0.542	6.76	0.955
		2.8	0.491	7.84	0.936
		3.0	0.438	9.00	0.913
		3.2	0.383	10.24	0.888
		3.4	0.326	11.56	0.860
		3.6	0.269	12.96	0.829
		3.8	0.210	14.44	0.795
		4.0	0.150	16.00	0.758
		4.2	0.089	17.64	0.717
		4.4	0.028	19.36	0.672
		4.6	-.033	21.16	0.618
		4.8	-.092	23.04	0.556
		5.0	-.150	25.00	0.482
		5.2	-.206	27.04	0.414
		5.4	-.258	29.16	0.340
		5.6	-.305	31.36	0.272
		5.8	-.348	33.64	0.195
		6.0	-.386	36.00	0.141

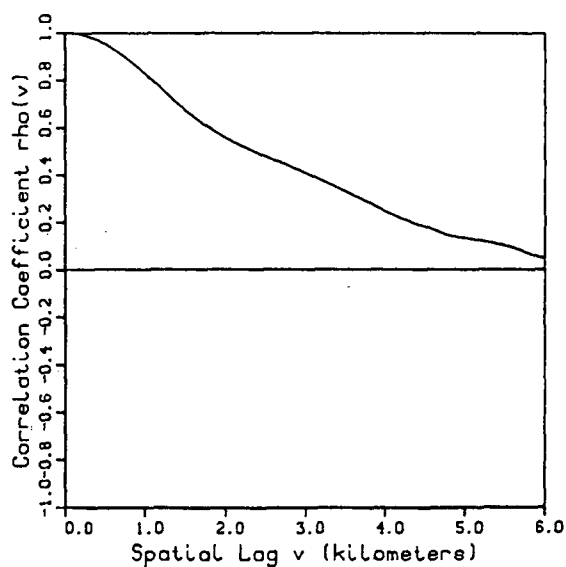
Walnut Gulch, Arizona

Ac=154.21 sq.km.

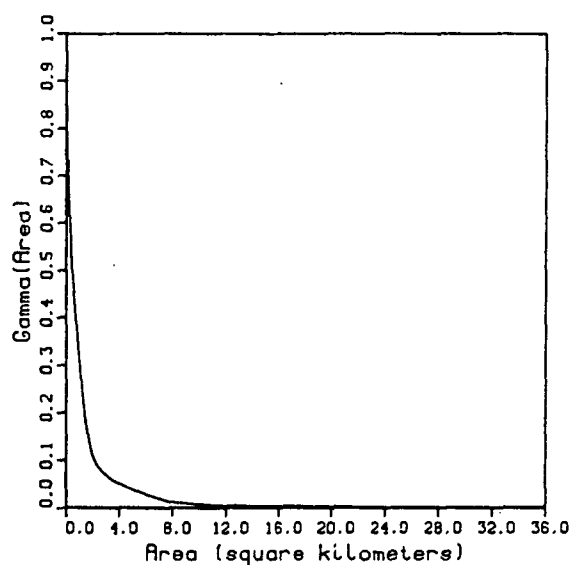
Storm Day
July 31, 1974



Spatial Correlation



Variance Function



Storm Day July 31 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.911$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.089$

Expected Value of Point Depth (mm.): $E(Y) = 0.100$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.160$

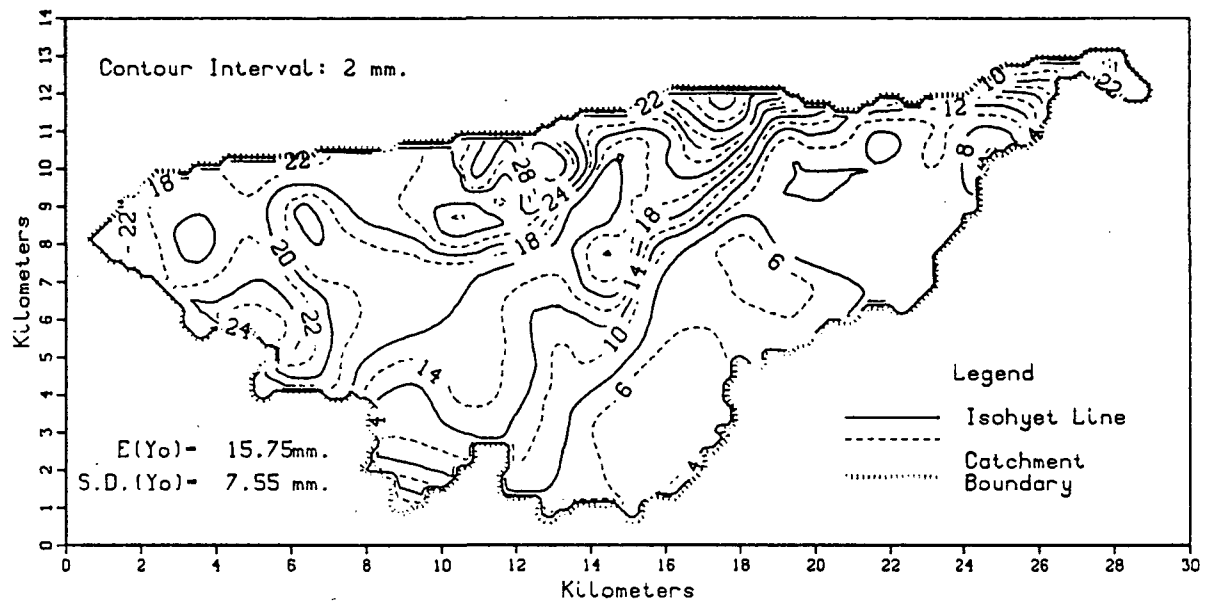
Coef. of Skewness of Point Depth: $S.C.(Y) = 4.186$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.046	0.0	1.000	0.00	1.000
2	0.014	0.2	0.991	0.04	0.858
3	0.000	0.4	0.968	0.16	0.703
		0.6	0.930	0.36	0.558
		0.8	0.882	0.64	0.431
		1.0	0.825	1.00	0.311
		1.2	0.764	1.44	0.193
		1.4	0.701	1.96	0.112
		1.6	0.644	2.56	0.080
		1.8	0.597	3.24	0.063
		2.0	0.555	4.00	0.050
		2.2	0.522	4.84	0.039
		2.4	0.491	5.76	0.030
		2.6	0.462	6.76	0.020
		2.8	0.435	7.84	0.012
		3.0	0.406	9.00	0.008
		3.2	0.374	10.24	0.006
		3.4	0.344	11.56	0.004
		3.6	0.312	12.96	0.003
		3.8	0.282	14.44	0.003
		4.0	0.245	16.00	0.003
		4.2	0.215	17.64	0.002
		4.4	0.190	19.36	0.002
		4.6	0.169	21.16	0.001
		4.8	0.143	23.04	0.001
		5.0	0.132	25.00	0.000
		5.2	0.122	27.04	0.000
		5.4	0.108	29.16	0.000
		5.6	0.092	31.36	0.000
		5.8	0.067	33.64	0.000
		6.0	0.048	36.00	0.000

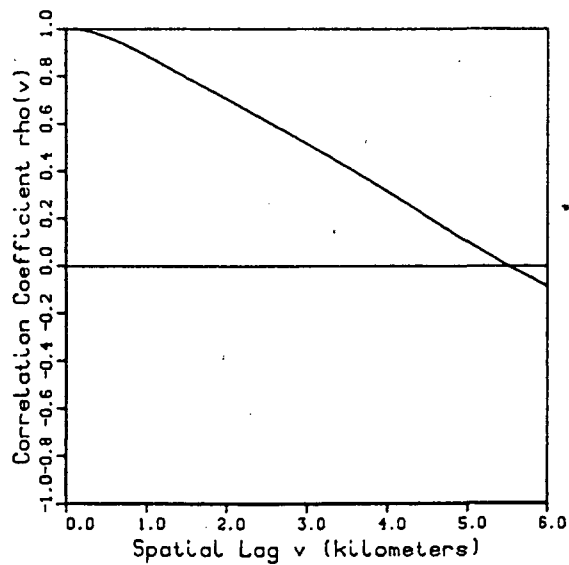
Walnut Gulch, Arizona

Ac=154.21 sq.km.

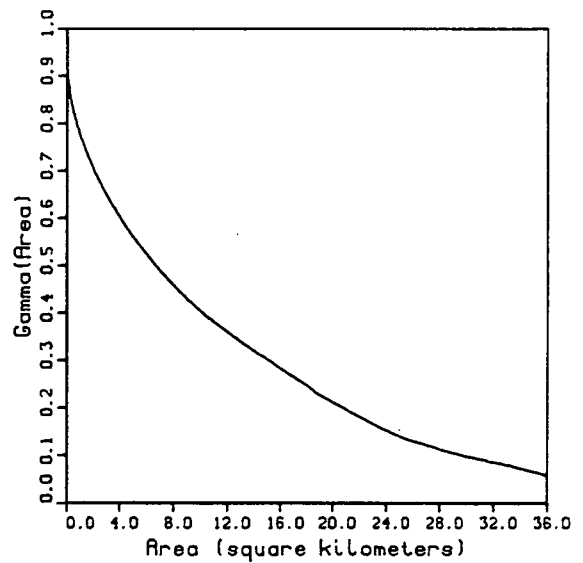
Storm Day
Aug 1, 1974



Spatial Correlation



Variance Function



Storm Day Aug 1 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 14.666$

Variance of Point Depth (mm. sq.): $Var(Y) = 49.583$

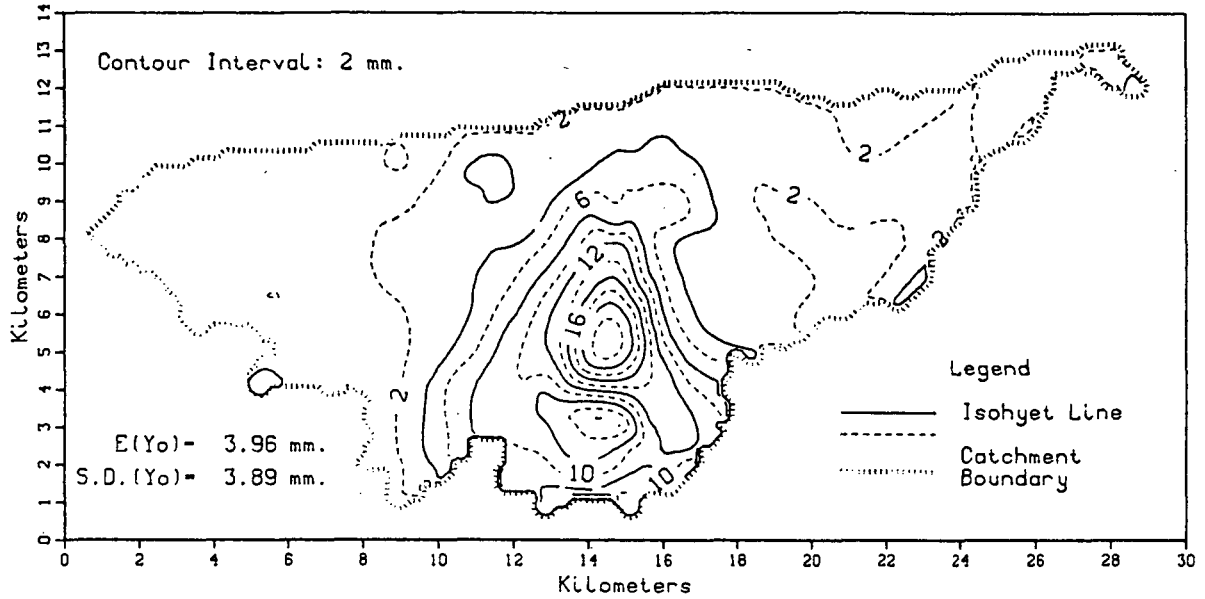
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.525$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
3	1.000	0.2	0.994	0.04	0.943
5	0.969	0.4	0.976	0.16	0.886
7	0.847	0.6	0.951	0.36	0.845
9	0.720	0.8	0.919	0.64	0.811
11	0.600	1.0	0.884	1.00	0.777
13	0.542	1.2	0.847	1.44	0.742
15	0.470	1.4	0.809	1.96	0.706
17	0.376	1.6	0.772	2.56	0.671
19	0.301	1.8	0.737	3.24	0.635
21	0.224	2.0	0.701	4.00	0.600
23	0.114	2.2	0.663	4.84	0.565
25	0.066	2.4	0.625	5.76	0.530
27	0.042	2.6	0.588	6.76	0.495
29	0.023	2.8	0.551	7.84	0.460
31	0.015	3.0	0.512	9.00	0.428
33	0.006	3.2	0.473	10.24	0.397
35	0.003	3.4	0.433	11.56	0.367
37	0.002	3.6	0.393	12.96	0.339
39	0.002	3.8	0.353	14.44	0.311
41	0.002	4.0	0.311	16.00	0.282
43	0.001	4.2	0.269	17.64	0.251
45	0.001	4.4	0.225	19.36	0.222
47	0.000	4.6	0.182	21.16	0.193
49	0.000	4.8	0.139	23.04	0.165
		5.2	0.058	27.04	0.121
		5.4	0.019	29.16	0.103
		5.6	-0.019	31.36	0.089
		5.8	-0.055	33.64	0.074
		6.0	-0.091	36.00	0.056

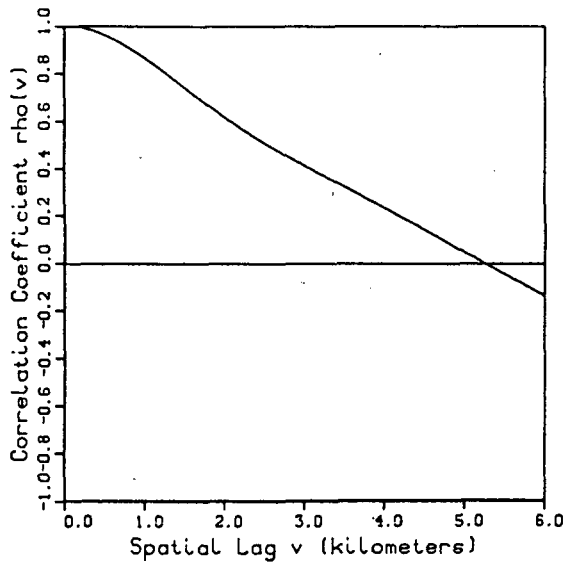
Walnut Gulch, Arizona

$A_c = 154.21$ sq.km.

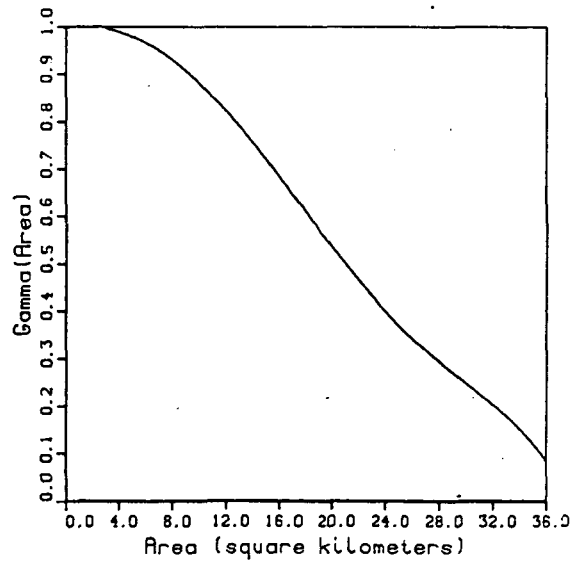
Storm Day
Aug 2, 1974



Spatial Correlation



Variance Function



Storm Day Aug 2 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c) \approx 0.001$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c) \approx 0.999$

Expected Value of Point Depth (mm.): $E(Y) = 4.456$

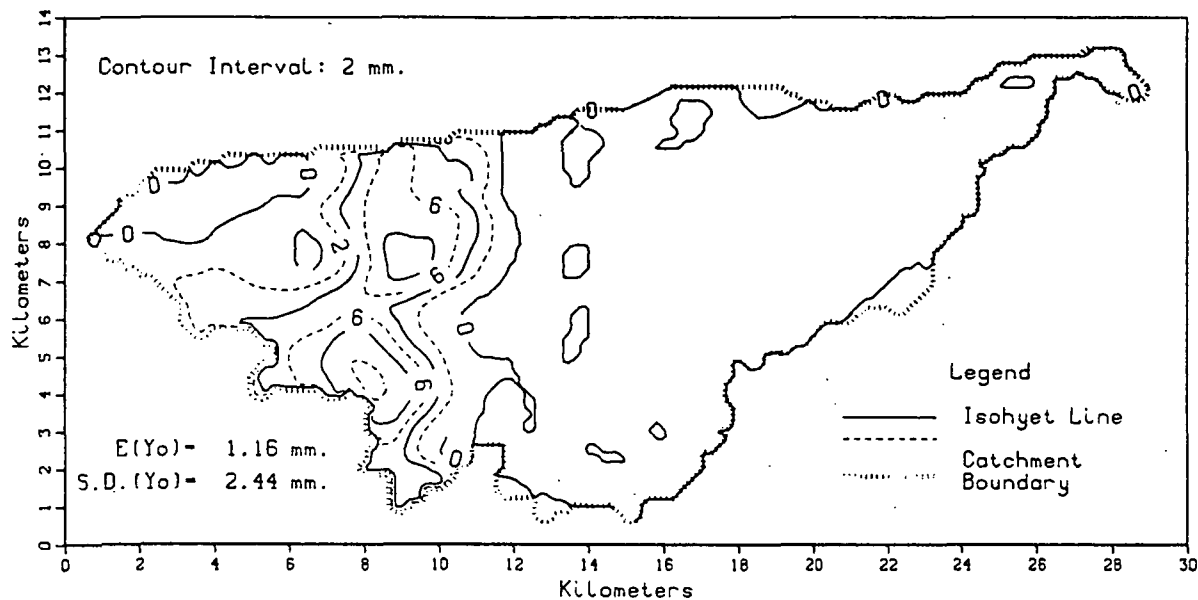
Variance of Point Depth (mm. sq.): $Var(Y) = 18.251$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.756$

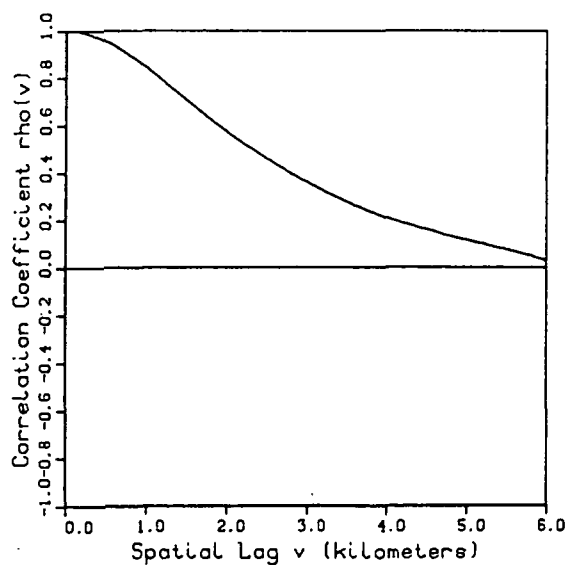
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.876	0.0	1.000	0.00	1.000
2	0.678	0.2	0.993	0.04	1.008
3	0.467	0.4	0.975	0.16	1.012
4	0.336	0.6	0.946	0.36	1.014
5	0.282	0.8	0.908	0.64	1.014
6	0.247	1.0	0.864	1.00	1.013
7	0.210	1.2	0.816	1.44	1.010
8	0.183	1.4	0.765	1.96	1.007
9	0.152	1.6	0.714	2.56	1.001
10	0.124	1.8	0.663	3.24	0.994
11	0.101	2.0	0.615	4.00	0.987
12	0.077	2.2	0.570	4.84	0.979
13	0.053	2.4	0.527	5.76	0.968
14	0.040	2.6	0.487	6.76	0.953
15	0.032	2.8	0.448	7.84	0.932
16	0.027	3.0	0.412	9.00	0.906
17	0.023	3.2	0.376	10.24	0.873
18	0.018	3.4	0.340	11.56	0.835
19	0.015	3.6	0.305	12.96	0.791
20	0.011	3.8	0.269	14.44	0.740
21	0.008	4.0	0.233	16.00	0.684
22	0.004	4.2	0.195	17.64	0.621
23	0.000	4.4	0.158	19.36	0.557
24	0.000	4.6	0.120	21.16	0.494
		4.8	0.082	23.04	0.429
		5.0	0.044	25.00	0.366
		5.2	0.007	27.04	0.315
		5.4	-0.030	29.16	0.265
		5.6	-0.066	31.36	0.217
		5.8	-0.103	33.64	0.161
		6.0	-0.140	36.00	0.084

Walnut Gulch, Arizona
Ac=154.21 sq.km.

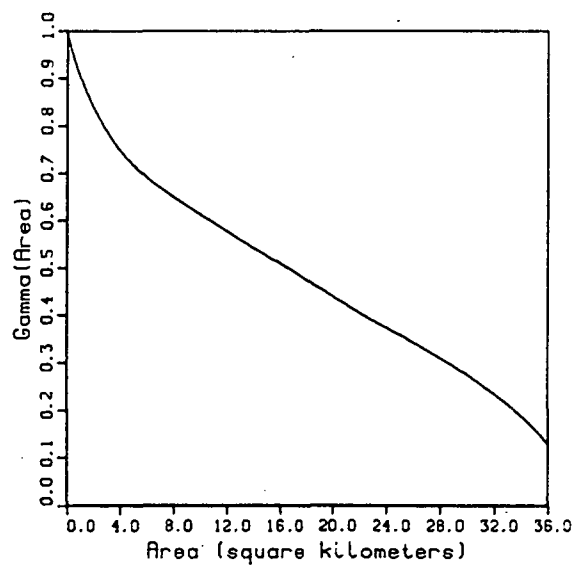
Storm Day
Aug 3, 1974



Spatial Correlation



Variance Function



Storm Day Aug 3 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.603$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.397$

Expected Value of Point Depth (mm.): $E(Y) = 1.243$

Variance of Point Depth (mm. sq.): $Var(Y) = 5.806$

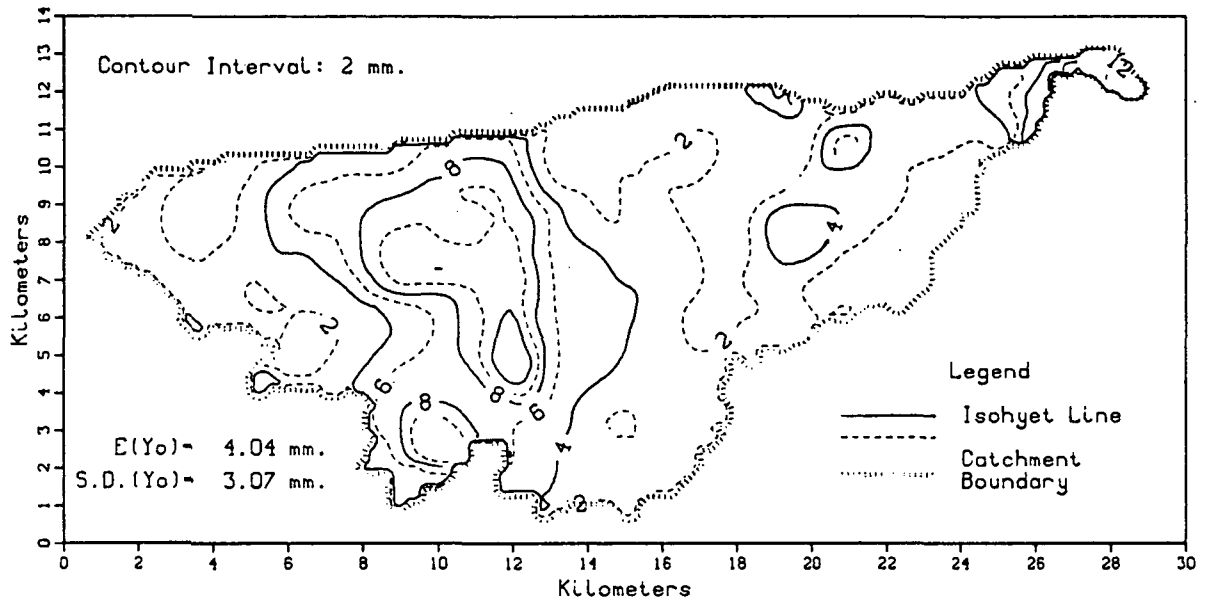
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.930$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.246	0.0	1.000	0.00	1.000
2	0.211	0.2	0.992	0.04	0.995
3	0.178	0.4	0.970	0.16	0.981
4	0.150	0.6	0.935	0.36	0.956
5	0.116	0.8	0.892	0.64	0.930
6	0.083	1.0	0.842	1.00	0.901
7	0.048	1.2	0.788	1.44	0.871
8	0.030	1.4	0.732	1.96	0.839
9	0.013	1.6	0.676	2.56	0.807
10	0.003	1.8	0.623	3.24	0.775
11	0.000	2.0	0.572	4.00	0.745
		2.2	0.524	4.84	0.718
		2.4	0.480	5.76	0.693
		2.6	0.437	6.76	0.671
		2.8	0.396	7.84	0.650
		3.0	0.359	9.00	0.629
		3.2	0.324	10.24	0.607
		3.4	0.292	11.56	0.583
		3.6	0.261	12.96	0.559
		3.8	0.233	14.44	0.534
		4.0	0.209	16.00	0.508
		4.2	0.187	17.64	0.481
		4.4	0.168	19.36	0.450
		4.6	0.150	21.16	0.419
		4.8	0.132	23.04	0.387
		5.0	0.115	25.00	0.358
		5.2	0.099	27.04	0.325
		5.4	0.083	29.16	0.289
		5.6	0.067	31.36	0.247
		5.8	0.049	33.64	0.196
		6.0	0.029	36.00	0.129

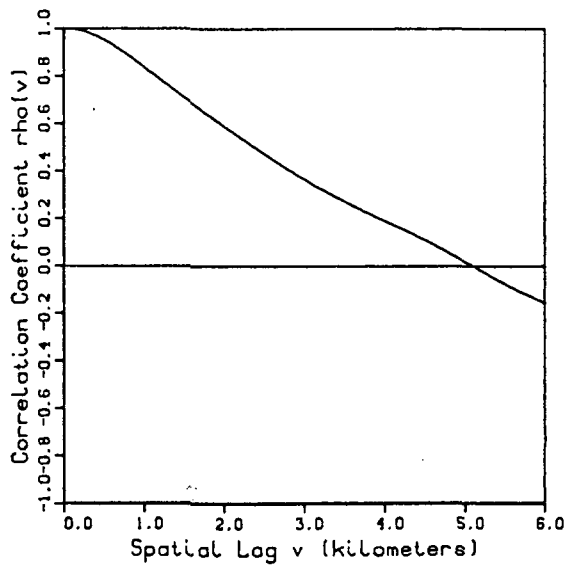
Walnut Gulch, Arizona

Ac=154.21 sq.km.

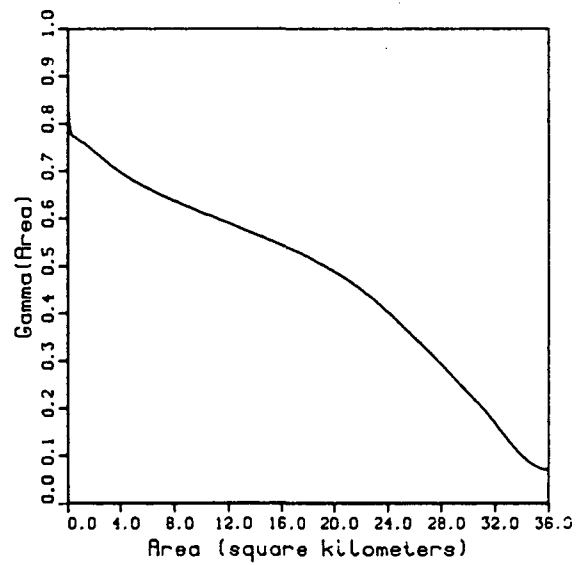
Storm Day
Aug 4, 1974



Spatial Correlation



Variance Function



Storm Day Aug 4 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.003$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.997$

Expected Value of Point Depth (mm.): $E(Y)=4.389$

Variance of Point Depth (mm. sq.): $Var(Y)=11.501$

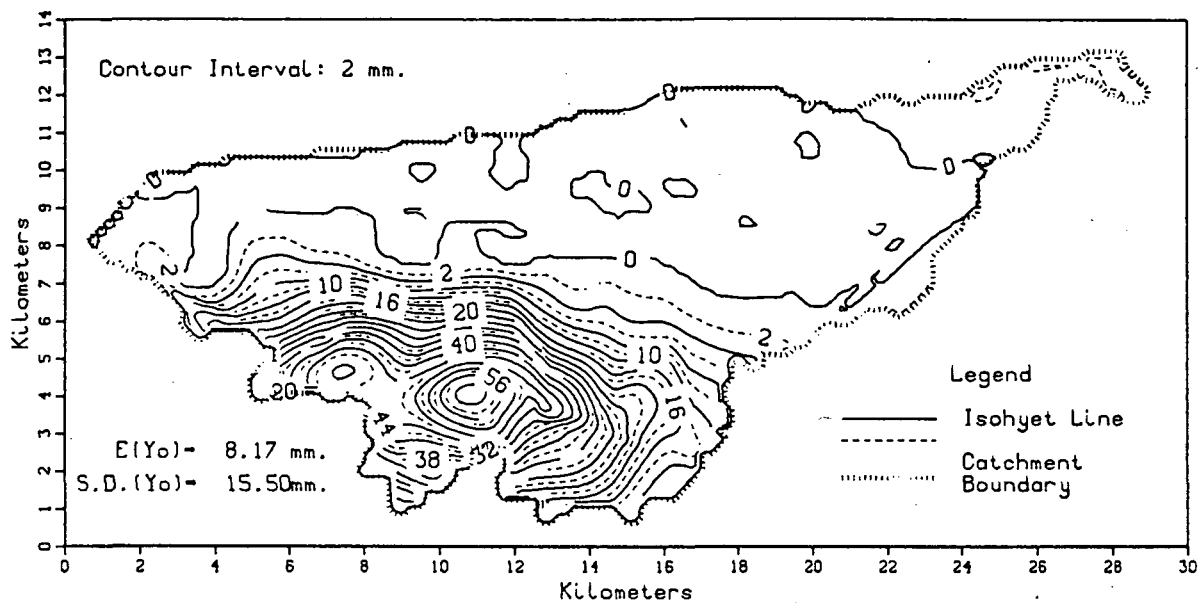
Coef. of Skewness of Point Depth: $S.C.(Y)=2.089$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.950	0.0	1.000	0.00	1.000
2	0.764	0.2	0.992	0.04	0.898
3	0.521	0.4	0.968	0.16	0.805
4	0.406	0.6	0.931	0.36	0.772
5	0.324	0.8	0.886	0.64	0.769
6	0.255	1.0	0.835	1.00	0.762
7	0.201	1.2	0.784	1.44	0.753
8	0.148	1.4	0.734	1.96	0.741
9	0.113	1.6	0.684	2.56	0.726
10	0.075	1.8	0.636	3.24	0.711
11	0.042	2.0	0.588	4.00	0.695
12	0.015	2.2	0.541	4.84	0.680
13	0.009	2.4	0.494	5.76	0.665
14	0.006	2.6	0.448	6.76	0.651
15	0.006	2.8	0.404	7.84	0.636
16	0.006	3.0	0.363	9.00	0.622
17	0.005	3.2	0.324	10.24	0.608
18	0.005	3.4	0.287	11.56	0.593
19	0.005	3.6	0.252	12.96	0.577
20	0.004	3.8	0.218	14.44	0.560
21	0.004	4.0	0.185	16.00	0.541
22	0.003	4.2	0.154	17.64	0.521
23	0.003	4.4	0.122	19.36	0.497
24	0.002	4.6	0.088	21.16	0.465
25	0.002	4.8	0.052	23.04	0.426
26	0.002	5.0	0.014	25.00	0.374
27	0.002	5.2	-.024	27.04	0.319
28	0.001	5.4	-.061	29.16	0.256
29	0.001	5.6	-.097	31.36	0.191
30	0.001	5.8	-.131	33.64	0.110
31	0.001	6.0	-.161	36.00	0.070
32	0.000				
33	0.000				
34	0.000				

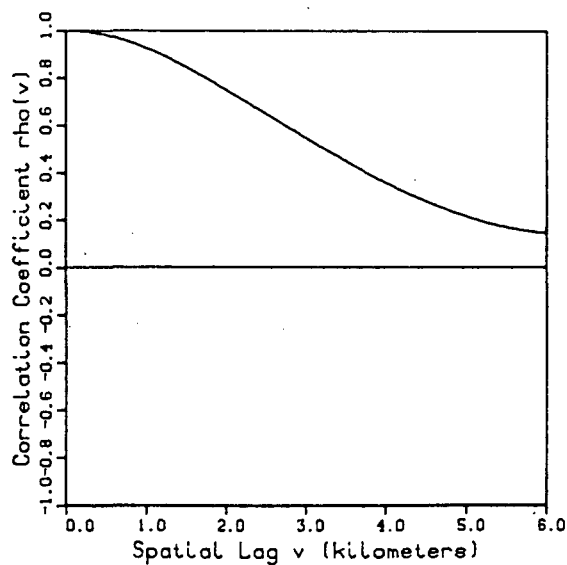
Walnut Gulch, Arizona

Ac=154.21 sq.km.

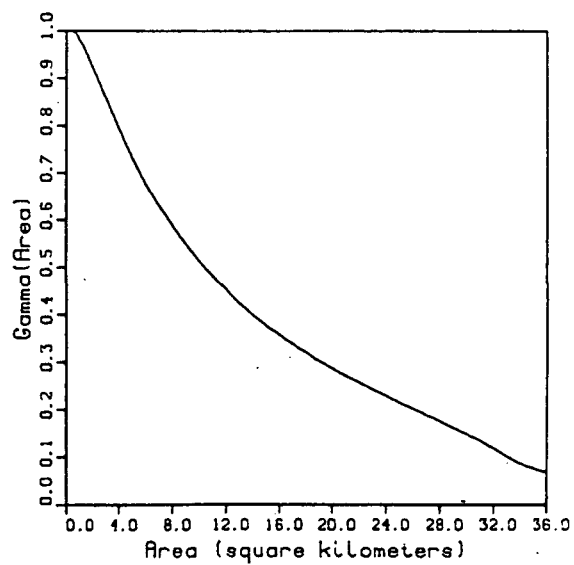
Storm Day
Aug 5, 1974



Spatial Correlation



Variance Function



Storm Day Aug 5 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.365$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.635$

Expected Value of Point Depth (mm.): $E(Y)=10.173$

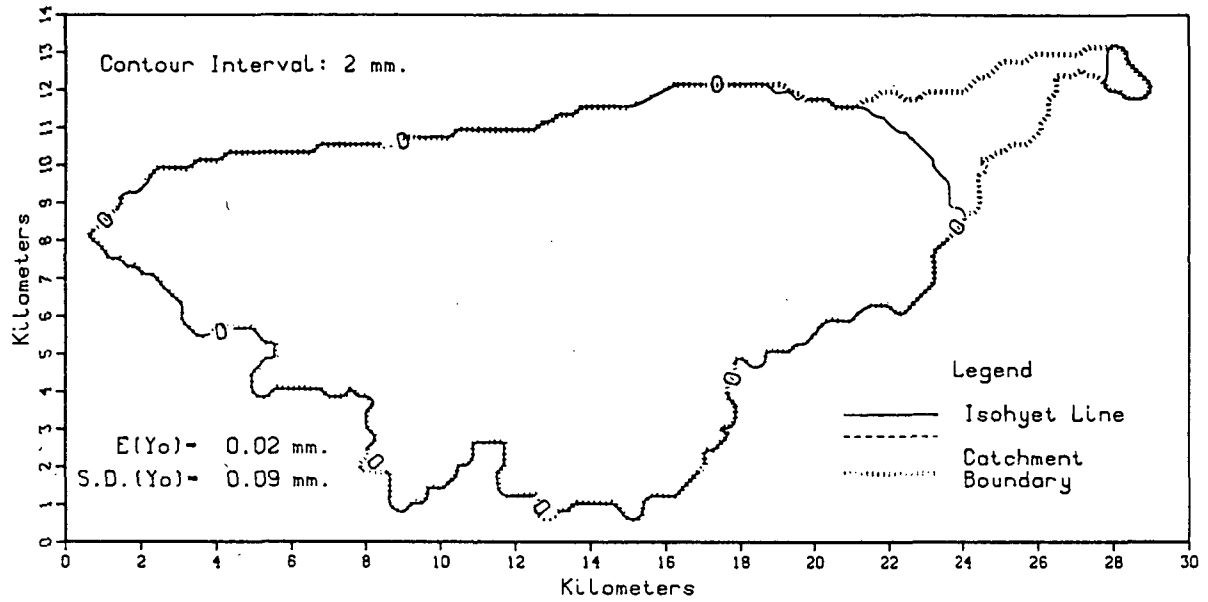
Variance of Point Depth (mm. sq.): $Var(Y)=268.588$

Coef. of Skewness of Point Depth: $S.C.(Y)=1.600$

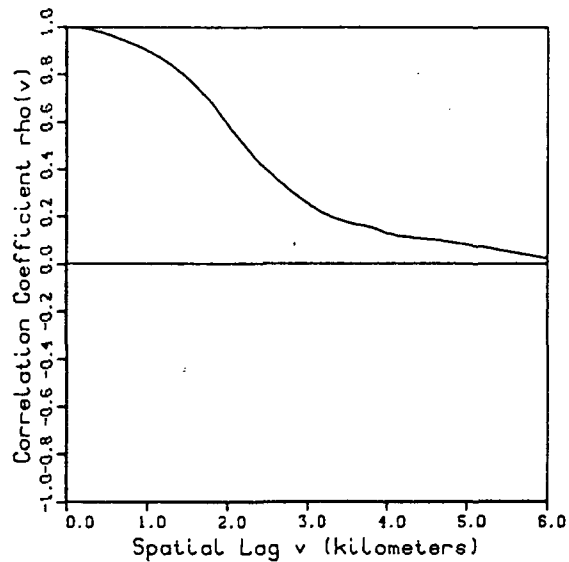
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.464	0.0	1.000	0.00	1.000
3	0.373	0.2	0.996	0.04	1.011
5	0.341	0.4	0.986	0.16	1.014
7	0.320	0.6	0.970	0.36	1.008
9	0.303	0.8	0.949	0.64	0.996
11	0.286	1.0	0.923	1.00	0.979
13	0.265	1.2	0.893	1.44	0.955
15	0.246	1.4	0.860	1.96	0.923
17	0.229	1.6	0.824	2.56	0.883
19	0.214	1.8	0.786	3.24	0.839
21	0.199	2.0	0.747	4.00	0.790
23	0.186	2.2	0.707	4.84	0.739
25	0.174	2.4	0.666	5.76	0.685
27	0.164	2.6	0.626	6.76	0.639
29	0.154	2.8	0.585	7.84	0.593
31	0.144	3.0	0.545	9.00	0.548
33	0.134	3.2	0.506	10.24	0.505
35	0.125	3.4	0.467	11.56	0.464
37	0.113	3.6	0.428	12.96	0.425
39	0.103	3.8	0.391	14.44	0.389
41	0.095	4.0	0.356	16.00	0.356
43	0.085	4.2	0.323	17.64	0.325
45	0.075	4.4	0.293	19.36	0.296
47	0.064	4.6	0.264	21.16	0.268
49	0.050	4.8	0.238	23.04	0.241
51	0.036	5.0	0.214	25.00	0.213
53	0.025	5.2	0.193	27.04	0.187
55	0.019	5.4	0.176	29.16	0.158
57	0.015	5.6	0.162	31.36	0.129
59	0.011	5.8	0.152	33.64	0.091
61	0.008	6.0	0.145	36.00	0.069
63	0.004				
65	0.001				

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

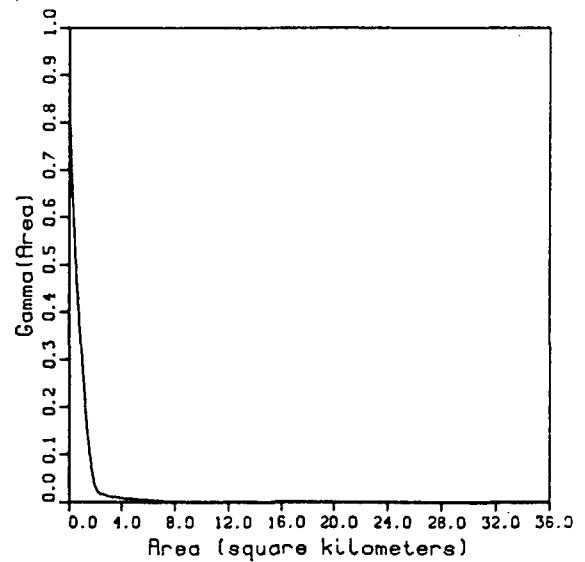
Storm Day
 Aug 9, 1974



Spatial Correlation



Variance Function



Storm Day Aug 9 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.943$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.057$

Expected Value of Point Depth (mm.): $E(Y) = 0.018$

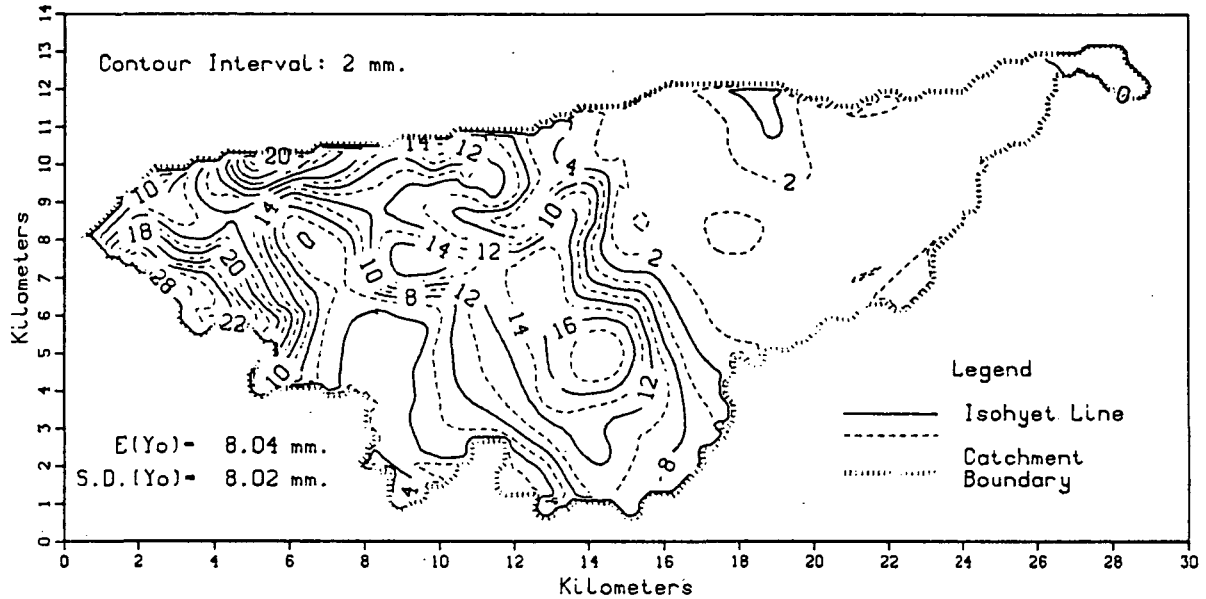
Variance of Point Depth (mm. sq.): $Var(Y) = 0.007$

Coef. of Skewness of Point Depth: $S.C.(Y) = 5.024$

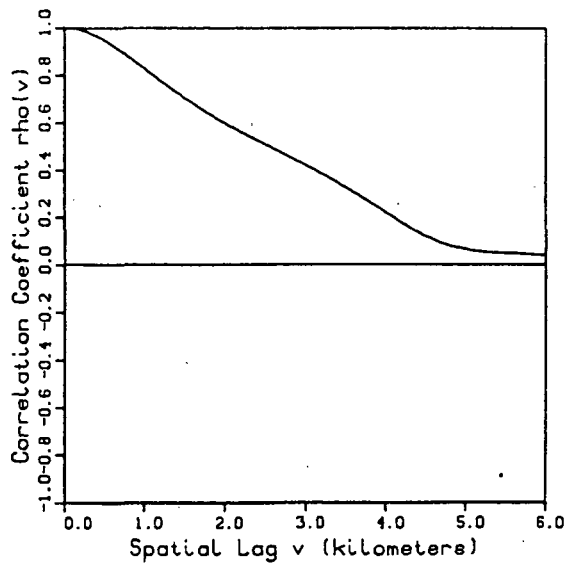
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.994	0.04	0.882
		0.4	0.979	0.16	0.748
		0.6	0.956	0.36	0.604
		0.8	0.929	0.64	0.450
		1.0	0.898	1.00	0.294
		1.2	0.859	1.44	0.133
		1.4	0.810	1.96	0.033
		1.6	0.748	2.56	0.015
		1.8	0.678	3.24	0.011
		2.0	0.587	4.00	0.008
		2.2	0.505	4.84	0.005
		2.4	0.424	5.76	0.004
		2.6	0.362	6.76	0.002
		2.8	0.303	7.84	0.000
		3.0	0.254	9.00	0.000
		3.2	0.212	10.24	0.000
		3.4	0.185	11.56	0.000
		3.6	0.167	12.96	0.000
		3.8	0.153	14.44	0.000
		4.0	0.128	16.00	0.000
		4.2	0.114	17.64	0.000
		4.4	0.106	19.36	0.000
		4.6	0.101	21.16	0.000
		4.8	0.090	23.04	0.000
		5.0	0.081	25.00	0.000
		5.2	0.070	27.04	0.000
		5.4	0.058	29.16	0.000
		5.6	0.046	31.36	0.000
		5.8	0.034	33.64	0.000
		6.0	0.023	36.00	0.000

Walnut Gulch, Arizona
Ac=154.21 sq.km.

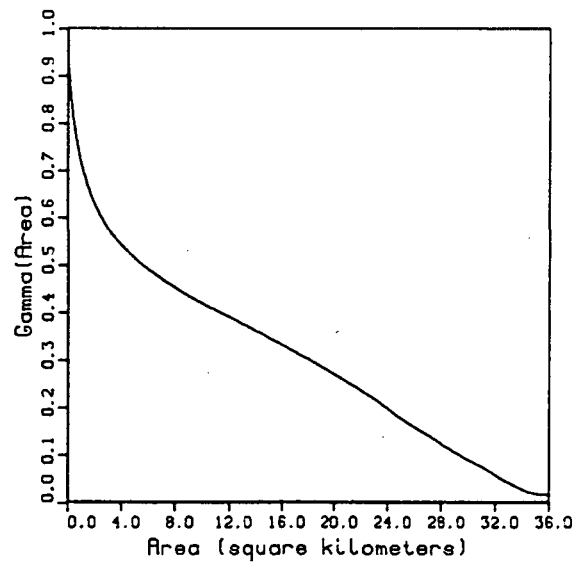
Storm Day
Aug 13, 1974



Spatial Correlation



Variance Function



Storm Day Aug 13 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.007$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.993$

Expected Value of Point Depth (mm.): $E(Y) = 7.859$

Variance of Point Depth (mm. sq.): $Var(Y) = 50.299$

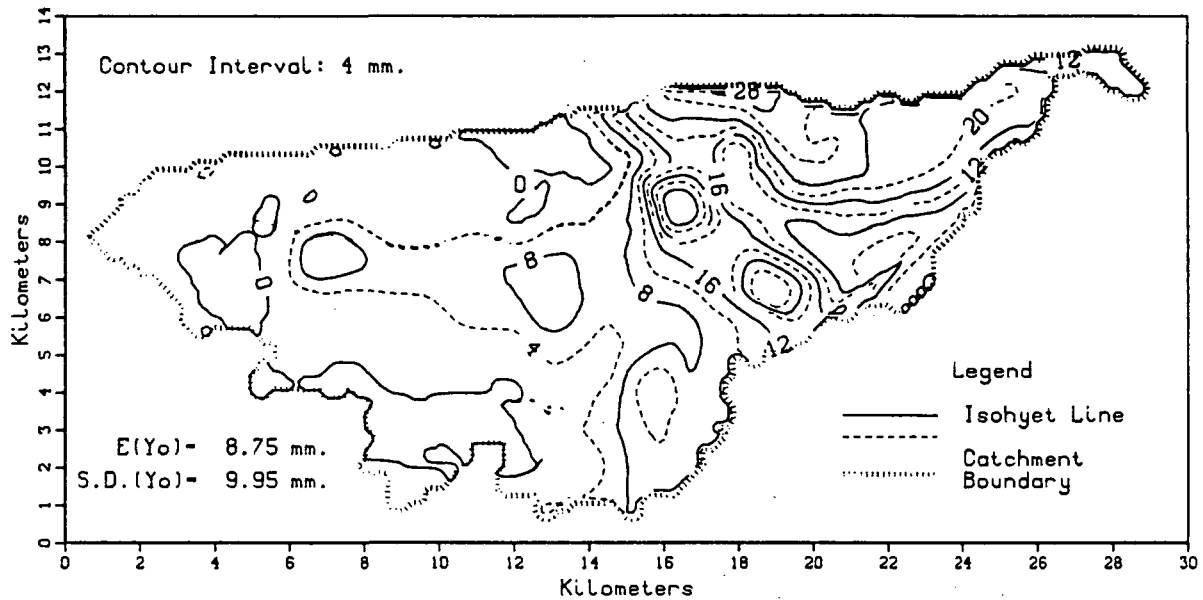
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.189$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
Acw/Ac (Y≥y)					
1	0.897	0.0	1.000	0.00	1.000
3	0.645	0.2	0.991	0.04	0.944
5	0.537	0.4	0.965	0.16	0.882
7	0.465	0.6	0.926	0.36	0.823
9	0.395	0.8	0.878	0.64	0.766
11	0.314	1.0	0.827	1.00	0.713
13	0.224	1.2	0.776	1.44	0.667
15	0.152	1.4	0.726	1.96	0.628
17	0.094	1.6	0.680	2.56	0.594
19	0.063	1.8	0.636	3.24	0.564
21	0.046	2.0	0.596	4.00	0.539
23	0.037	2.2	0.559	4.84	0.515
25	0.030	2.4	0.524	5.76	0.493
27	0.023	2.6	0.489	6.76	0.472
29	0.016	2.8	0.455	7.84	0.452
31	0.009	3.0	0.420	9.00	0.432
33	0.004	3.2	0.383	10.24	0.413
35	0.003	3.4	0.345	11.56	0.394
37	0.001	3.6	0.305	12.96	0.375
39	0.000	3.8	0.263	14.44	0.354
		4.0	0.221	16.00	0.330
		4.2	0.176	17.64	0.305
		4.4	0.134	19.36	0.278
		4.6	0.104	21.16	0.249
		4.8	0.080	23.04	0.215
		5.0	0.064	25.00	0.174
		5.2	0.054	27.04	0.139
		5.4	0.049	29.16	0.101
		5.6	0.047	31.36	0.069
		5.8	0.043	33.64	0.031
		6.0	0.040	36.00	0.015

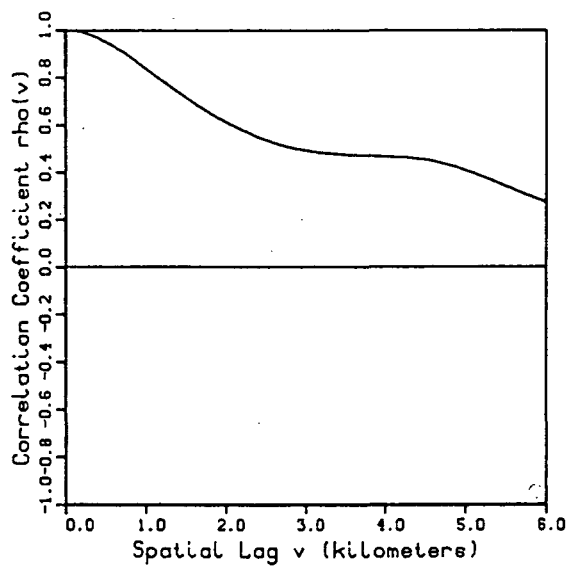
Walnut Gulch, Arizona

Ac=154.21 sq.km.

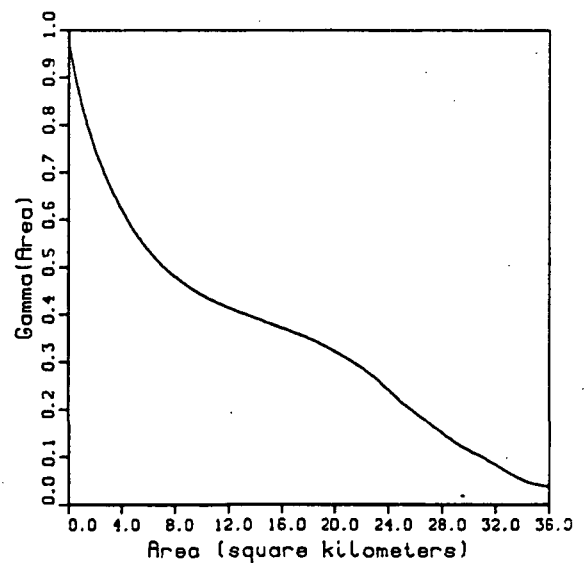
Storm Day
Aug 14, 1974



Spatial Correlation



Variance Function



Storm Day Aug 14 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.085$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.915$

Expected Value of Point Depth (mm.): $E(Y) = 8.182$

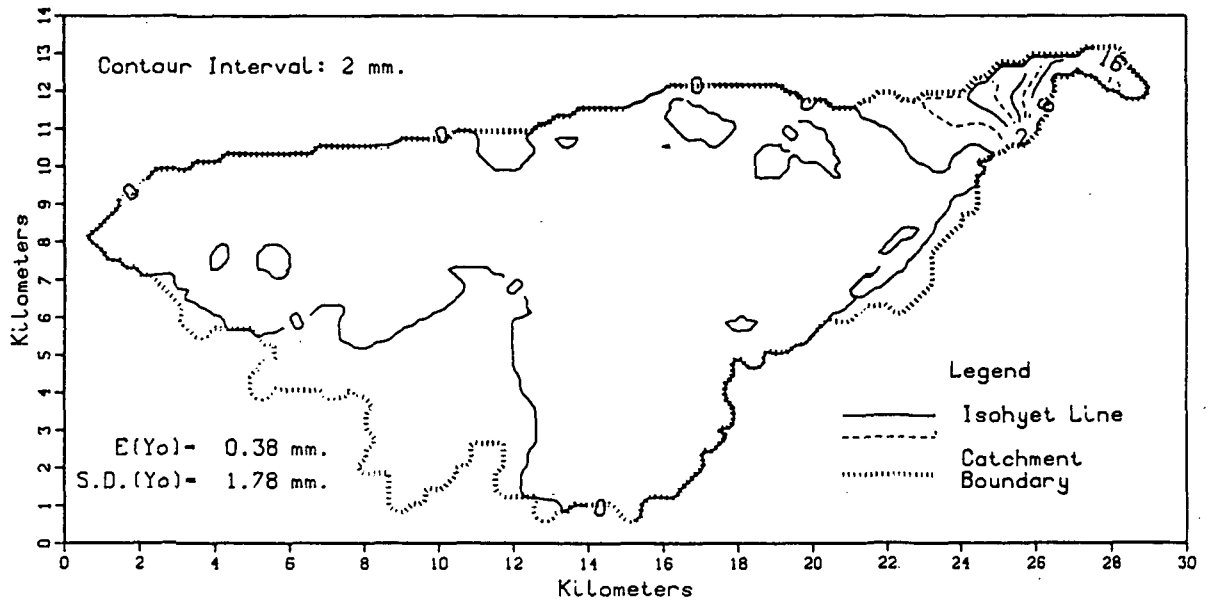
Variance of Point Depth (mm. sq.): $Var(Y) = 74.329$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.056$

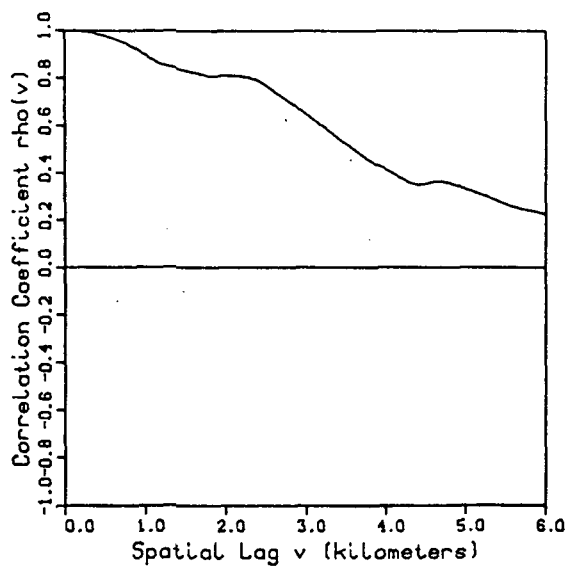
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.738	0.0	1.000	0.00	1.000
2	0.661	0.2	0.991	0.04	0.981
3	0.607	0.4	0.966	0.16	0.956
4	0.559	0.6	0.930	0.36	0.924
5	0.510	0.8	0.885	0.64	0.887
6	0.475	1.0	0.835	1.00	0.845
7	0.436	1.2	0.785	1.44	0.799
8	0.395	1.4	0.736	1.96	0.752
9	0.355	1.6	0.690	2.56	0.706
10	0.320	1.8	0.648	3.24	0.662
11	0.290	2.0	0.610	4.00	0.620
12	0.267	2.2	0.577	4.84	0.580
13	0.249	2.4	0.548	5.76	0.544
14	0.232	2.6	0.523	6.76	0.511
15	0.215	2.8	0.504	7.84	0.483
16	0.201	3.0	0.490	9.00	0.459
17	0.186	3.2	0.480	10.24	0.437
18	0.168	3.4	0.475	11.56	0.419
19	0.148	3.6	0.471	12.96	0.403
20	0.132	3.8	0.468	14.44	0.387
21	0.119	4.0	0.465	16.00	0.370
22	0.106	4.2	0.461	17.64	0.352
23	0.081	4.4	0.454	19.36	0.331
24	0.070	4.6	0.444	21.16	0.302
25	0.062	4.8	0.427	23.04	0.265
26	0.053	5.0	0.406	25.00	0.214
27	0.045	5.2	0.380	27.04	0.170
28	0.032	5.4	0.353	29.16	0.126
29	0.023	5.6	0.325	31.36	0.094
30	0.016	5.8	0.297	33.64	0.056
31	0.012	6.0	0.271	36.00	0.038
32	0.008				
33	0.006				
34	0.003				
35	0.001				
36	0.000				

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

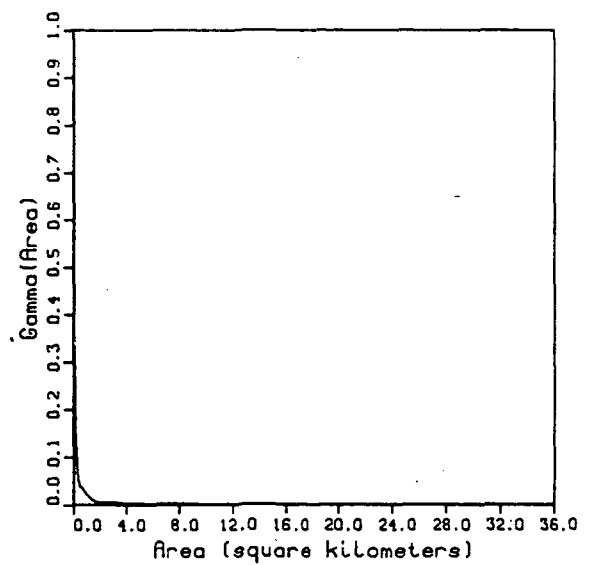
Storm Day
 Aug 15, 1974



Spatial Correlation



Variance Function



Storm Day Aug 15 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.715$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.285$

Expected Value of Point Depth (mm.): $E(Y) = 0.594$

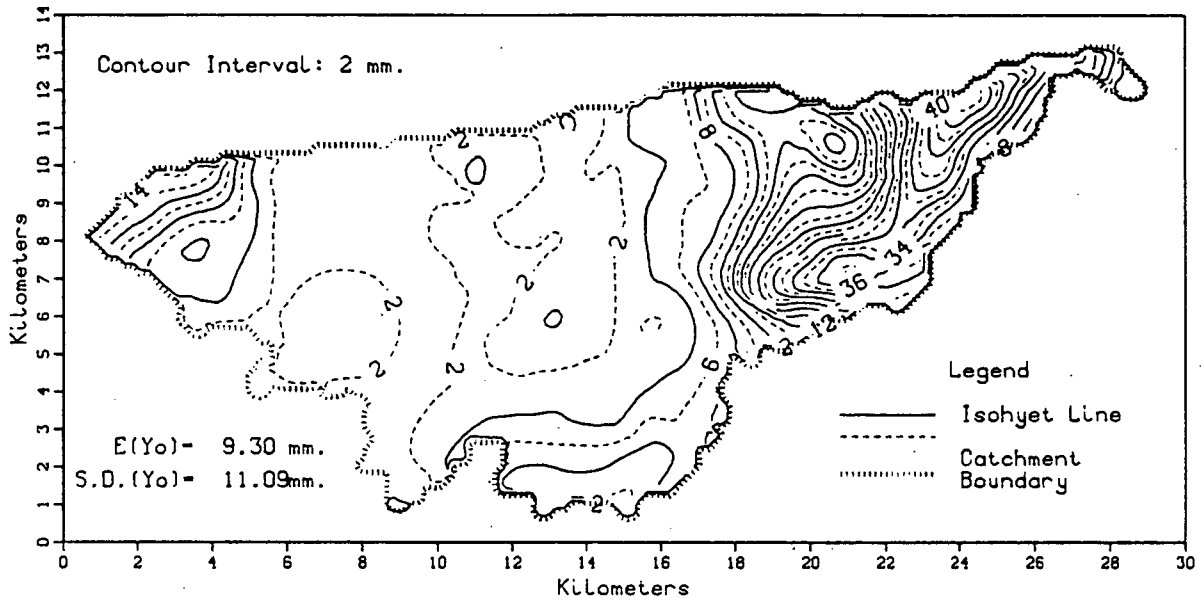
Variance of Point Depth (mm. sq.): $Var(Y) = 11.570$

Coef. of Skewness of Point Depth: $S.C.(Y) = 9.877$

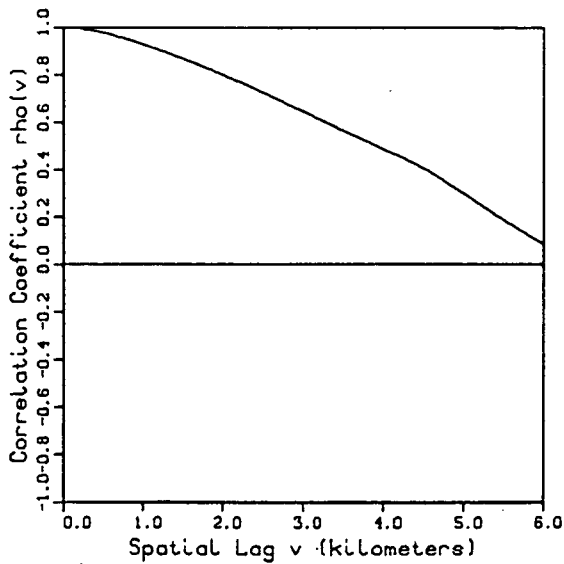
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.088	0.0	1.000	0.00	1.000
3	0.026	0.2	0.996	0.04	0.581
5	0.021	0.4	0.984	0.16	0.205
7	0.017	0.6	0.964	0.36	0.055
9	0.014	0.8	0.936	0.64	0.037
11	0.011	1.0	0.894	1.00	0.023
13	0.008	1.2	0.857	1.44	0.010
15	0.006	1.4	0.837	1.96	0.005
17	0.006	1.6	0.821	2.56	0.004
19	0.006	1.8	0.807	3.24	0.003
21	0.006	2.0	0.811	4.00	0.003
23	0.006	2.2	0.804	4.84	0.002
25	0.005	2.4	0.786	5.76	0.002
27	0.005	2.6	0.741	6.76	0.002
29	0.004	2.8	0.696	7.84	0.001
31	0.004	3.0	0.646	9.00	0.001
33	0.003	3.2	0.595	10.24	0.001
35	0.003	3.4	0.544	11.56	0.001
37	0.002	3.6	0.496	12.96	0.001
39	0.002	3.8	0.448	14.44	0.001
41	0.002	4.0	0.414	16.00	0.001
43	0.001	4.2	0.375	17.64	0.001
45	0.001	4.4	0.347	19.36	0.001
47	0.001	4.6	0.363	21.16	0.001
49	0.001	4.8	0.354	23.04	0.001
51	0.000	5.0	0.331	25.00	0.000
53	0.000	5.2	0.307	27.04	0.000
		5.4	0.282	29.16	0.000
		5.6	0.255	31.36	0.000
		5.8	0.239	33.64	0.000
		6.0	0.223	36.00	0.000

Walnut Gulch, Arizona
Ac=154.21 sq.km.

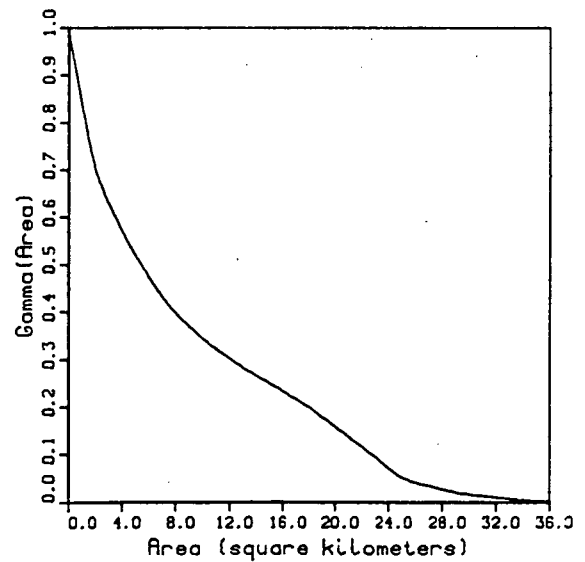
Storm Day
Aug 18, 1974



Spatial Correlation



Variance Function



Storm Day Aug 18 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.003$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.997$

Expected Value of Point Depth (mm.): $E(Y)=9.353$

Variance of Point Depth (mm. sq.): $Var(Y)=133.827$

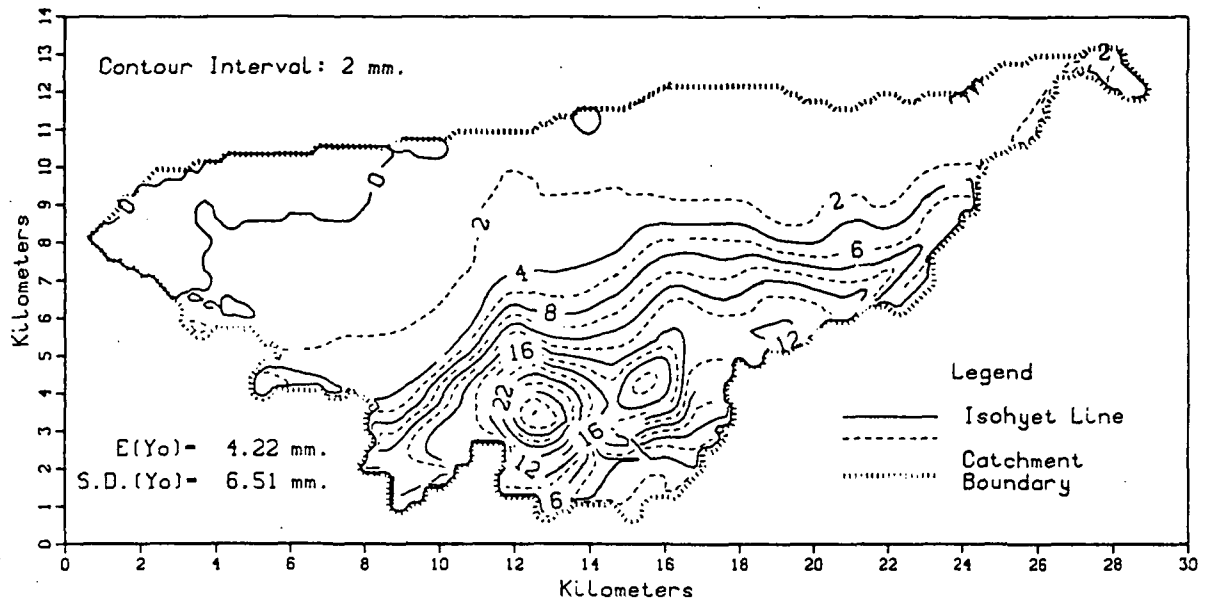
Coef. of Skewness of Point Depth: $S.C.(Y)=1.719$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.969	0.0	1.000	0.00	1.000
3	0.569	0.2	0.995	0.04	0.988
5	0.425	0.4	0.984	0.16	0.967
7	0.341	0.6	0.968	0.36	0.935
9	0.285	0.8	0.948	0.64	0.892
11	0.252	1.0	0.926	1.00	0.837
13	0.229	1.2	0.903	1.44	0.772
15	0.200	1.4	0.878	1.96	0.707
17	0.179	1.6	0.852	2.56	0.658
19	0.167	1.8	0.826	3.24	0.615
21	0.157	2.0	0.798	4.00	0.571
23	0.145	2.2	0.768	4.84	0.527
25	0.130	2.4	0.738	5.76	0.484
27	0.117	2.6	0.707	6.76	0.441
29	0.105	2.8	0.675	7.84	0.401
31	0.093	3.0	0.643	9.00	0.368
33	0.080	3.2	0.611	10.24	0.338
35	0.066	3.4	0.579	11.56	0.309
37	0.050	3.6	0.547	12.96	0.283
39	0.038	3.8	0.516	14.44	0.258
41	0.026	4.0	0.484	16.00	0.232
43	0.016	4.2	0.453	17.64	0.204
45	0.011	4.4	0.421	19.36	0.172
47	0.007	4.6	0.384	21.16	0.133
49	0.003	4.8	0.341	23.04	0.094
		5.2	0.252	27.04	0.034
		5.4	0.207	29.16	0.019
		5.6	0.165	31.36	0.012
		5.8	0.124	33.64	0.004
		6.0	0.085	36.00	0.001

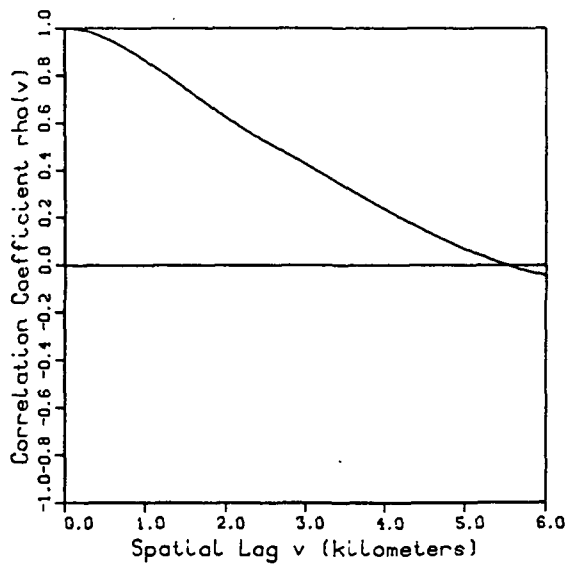
Walnut Gulch, Arizona

Ac=154.21 sq.km.

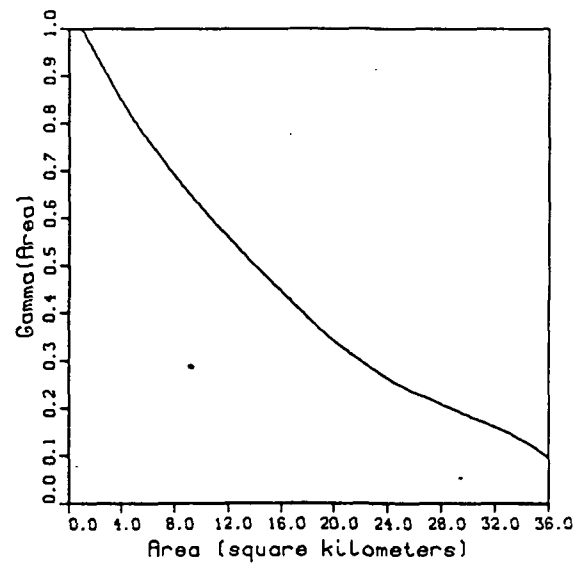
Storm Day
Aug 19, 1974



Spatial Correlation



Variance Function



Storm Day Aug 19 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c) = 0.078$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c) = 0.922$

Expected Value of Point Depth (mm.): $E(Y) = 5.409$

Variance of Point Depth (mm. sq.): $Var(Y) = 43.234$

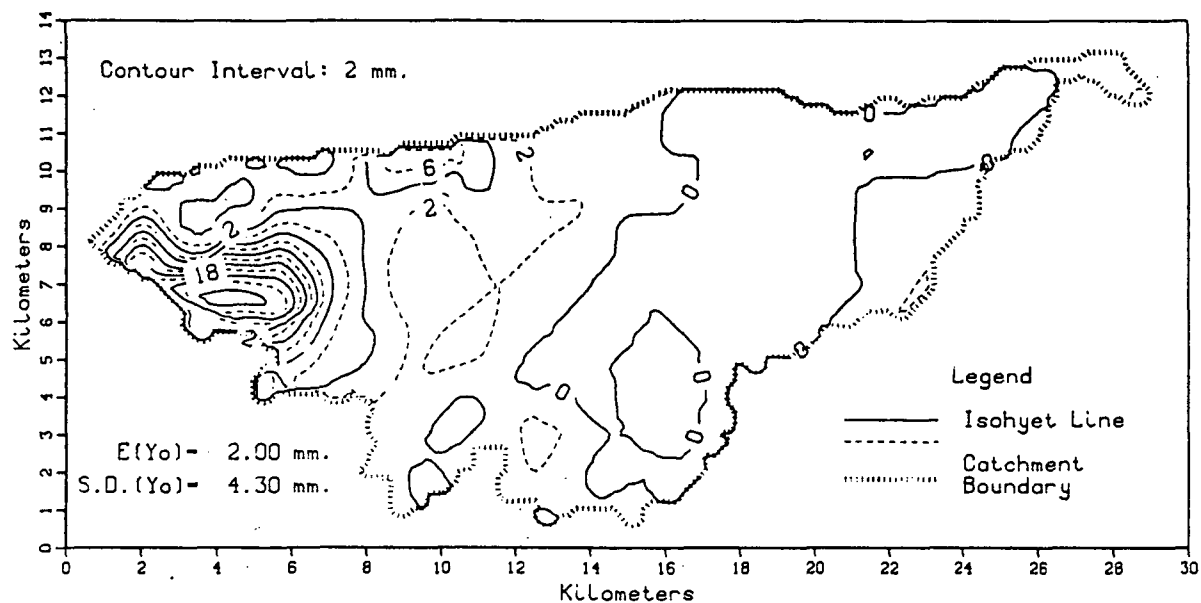
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.462$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.666	0.0	1.000	0.00	1.000
2	0.533	0.2	0.991	0.04	1.015
3	0.429	0.4	0.970	0.16	1.024
4	0.383	0.6	0.940	0.36	1.023
5	0.349	0.8	0.903	0.64	1.013
6	0.319	1.0	0.861	1.00	0.997
7	0.290	1.2	0.814	1.44	0.975
8	0.265	1.4	0.765	1.96	0.948
9	0.242	1.6	0.716	2.56	0.916
10	0.222	1.8	0.667	3.24	0.882
11	0.202	2.0	0.620	4.00	0.846
12	0.183	2.2	0.577	4.84	0.809
13	0.158	2.4	0.537	5.76	0.771
14	0.138	2.6	0.499	6.76	0.732
15	0.116	2.8	0.461	7.84	0.693
16	0.089	3.0	0.422	9.00	0.653
17	0.074	3.2	0.384	10.24	0.613
18	0.062	3.4	0.346	11.56	0.572
19	0.053	3.6	0.307	12.96	0.530
20	0.043	3.8	0.269	14.44	0.487
21	0.035	4.0	0.231	16.00	0.444
22	0.028	4.2	0.194	17.64	0.399
23	0.022	4.4	0.158	19.36	0.355
24	0.019	4.6	0.125	21.16	0.315
25	0.016	4.8	0.094	23.04	0.278
26	0.013	5.0	0.064	25.00	0.245
27	0.011	5.2	0.036	27.04	0.219
28	0.008	5.4	0.011	29.16	0.193
29	0.006	5.6	-0.012	31.36	0.167
30	0.004	5.8	-0.032	33.64	0.138
31	0.002	6.0	-0.047	36.00	0.096
32	0.000				
33	0.000				

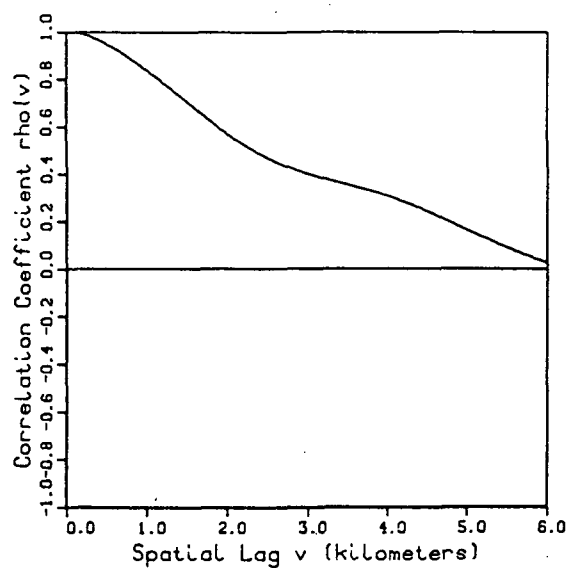
Walnut Gulch, Arizona

Ac=154.21 sq.km.

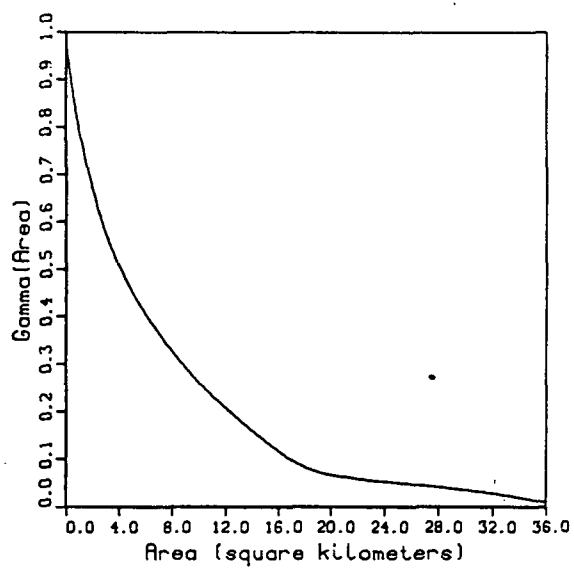
Storm Day
Aug 22, 1974



Spatial Correlation



Variance Function



Storm Day Aug 22 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.335$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.665$

Expected Value of Point Depth (mm.): $E(Y)=2.139$

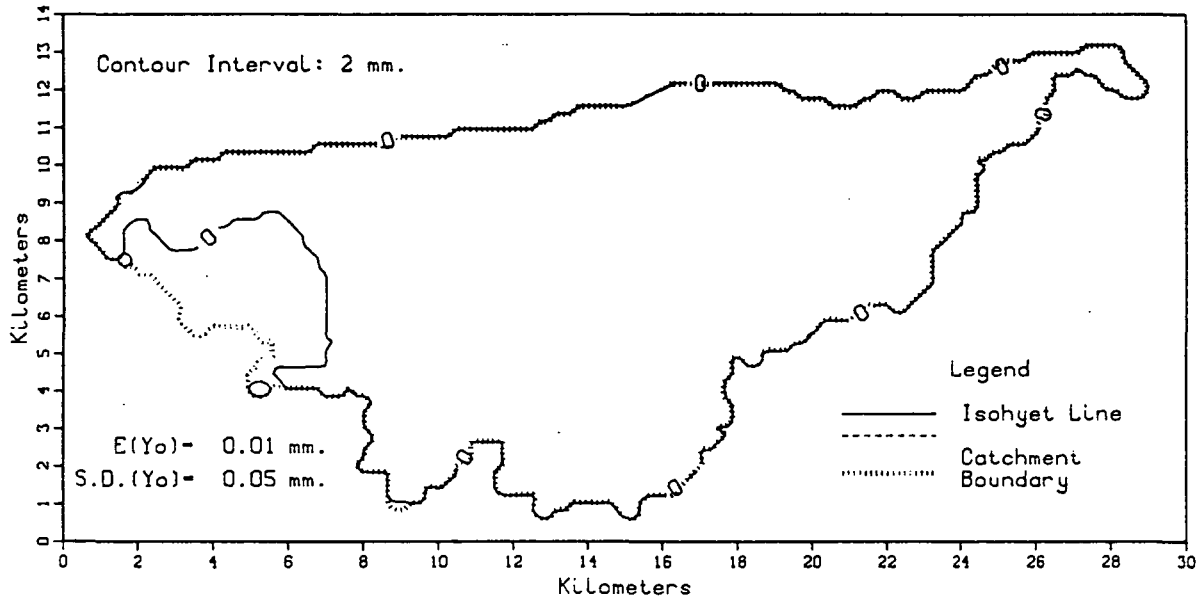
Variance of Point Depth (mm. sq.): $Var(Y)=18.148$

Coef. of Skewness of Point Depth: $S.C.(Y)=3.218$

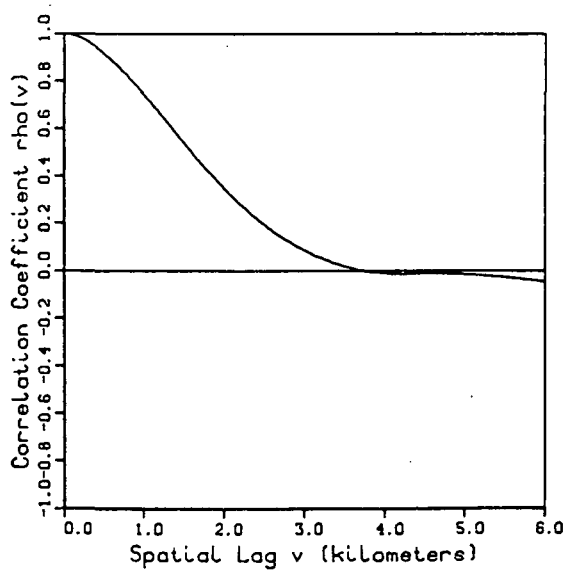
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.410	0.0	1.000	0.00	1.000
2	0.260	0.2	0.991	0.04	0.979
3	0.179	0.4	0.965	0.16	0.946
4	0.143	0.6	0.928	0.36	0.906
5	0.115	0.8	0.883	0.64	0.854
6	0.094	1.0	0.835	1.00	0.795
7	0.076	1.2	0.784	1.44	0.734
8	0.068	1.4	0.730	1.96	0.673
9	0.062	1.6	0.675	2.56	0.613
10	0.056	1.8	0.621	3.24	0.557
11	0.051	2.0	0.568	4.00	0.505
12	0.047	2.2	0.523	4.84	0.457
13	0.043	2.4	0.483	5.76	0.413
14	0.040	2.6	0.450	6.76	0.371
15	0.037	2.8	0.422	7.84	0.331
16	0.033	3.0	0.399	9.00	0.292
17	0.029	3.2	0.379	10.24	0.253
18	0.025	3.4	0.361	11.56	0.217
19	0.021	3.6	0.344	12.96	0.184
20	0.018	3.8	0.326	14.44	0.150
21	0.014	4.0	0.306	16.00	0.117
22	0.011	4.2	0.282	17.64	0.087
23	0.008	4.4	0.257	19.36	0.070
24	0.003	4.6	0.225	21.16	0.061
25	0.000	4.8	0.194	23.04	0.054
		5.0	0.164	25.00	0.049
		5.2	0.134	27.04	0.043
		5.4	0.105	29.16	0.037
		5.6	0.077	31.36	0.029
		5.8	0.051	33.64	0.020
		6.0	0.025	36.00	0.009

Walnut Gulch, Arizona
Ac=154.21 sq.km.

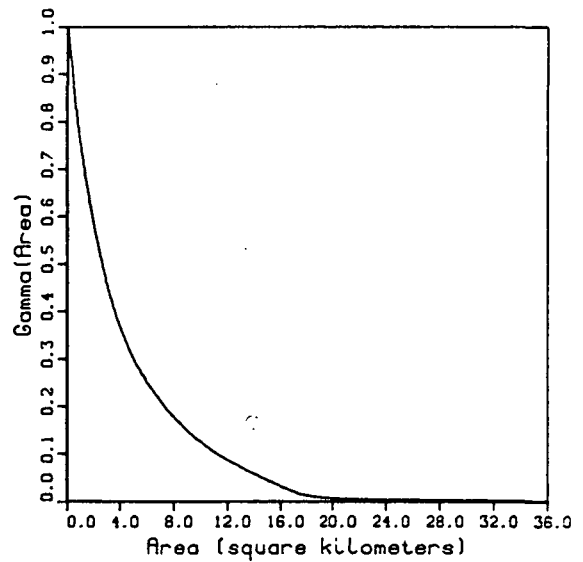
Storm Day
Aug 23, 1974



Spatial Correlation



Variance Function



Storm Day Aug 23 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.909$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.091$

Expected Value of Point Depth (mm.): $E(Y) = 0.012$

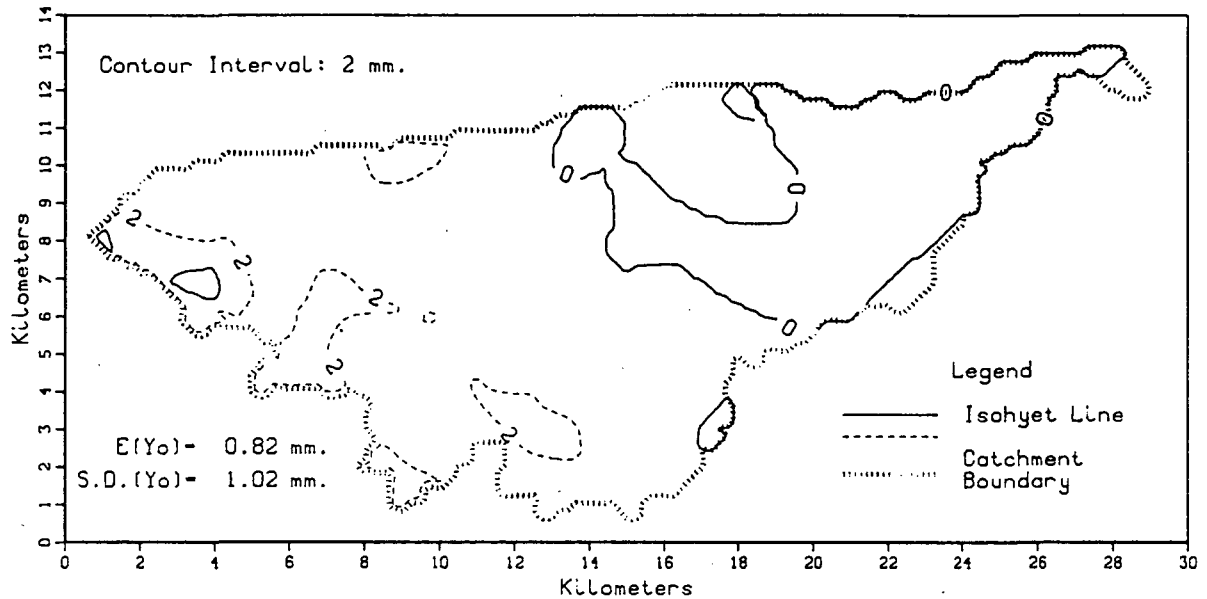
Variance of Point Depth (mm. sq.): $Var(Y) = 0.003$

Coef. of Skewness of Point Depth: $S.C.(Y) = 4.867$

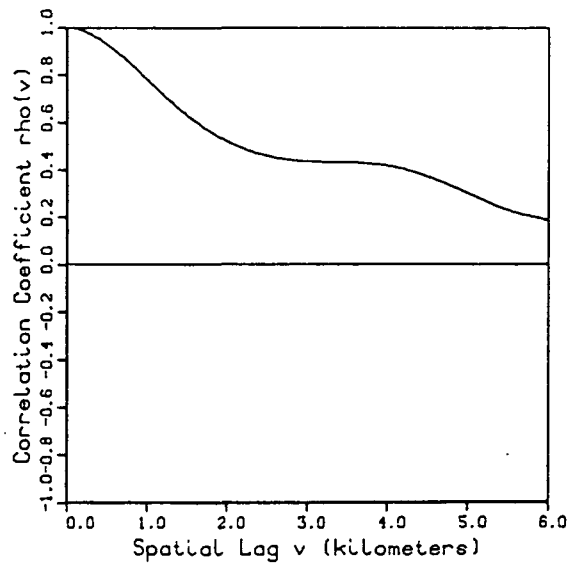
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.984	0.04	0.998
		0.4	0.943	0.16	0.971
		0.6	0.886	0.36	0.917
		0.8	0.817	0.64	0.844
		1.0	0.743	1.00	0.761
		1.2	0.663	1.44	0.675
		1.4	0.580	1.96	0.589
		1.6	0.497	2.56	0.507
		1.8	0.420	3.24	0.432
		2.0	0.347	4.00	0.366
		2.2	0.279	4.84	0.309
		2.4	0.219	5.76	0.261
		2.6	0.167	6.76	0.218
		2.8	0.122	7.84	0.181
		3.0	0.085	9.00	0.148
		3.2	0.053	10.24	0.119
		3.4	0.027	11.56	0.093
		3.6	0.007	12.96	0.072
		3.8	-.006	14.44	0.052
		4.0	-.013	16.00	0.031
		4.2	-.014	17.64	0.014
		4.4	-.012	19.36	0.006
		4.6	-.012	21.16	0.004
		4.8	-.013	23.04	0.003
		5.0	-.017	25.00	0.003
		5.2	-.022	27.04	0.002
		5.4	-.027	29.16	0.002
		5.6	-.034	31.36	0.001
		5.8	-.041	33.64	0.001
		6.0	-.049	36.00	0.000

Walnut Gulch, Arizona
Ac=154.21 sq.km.

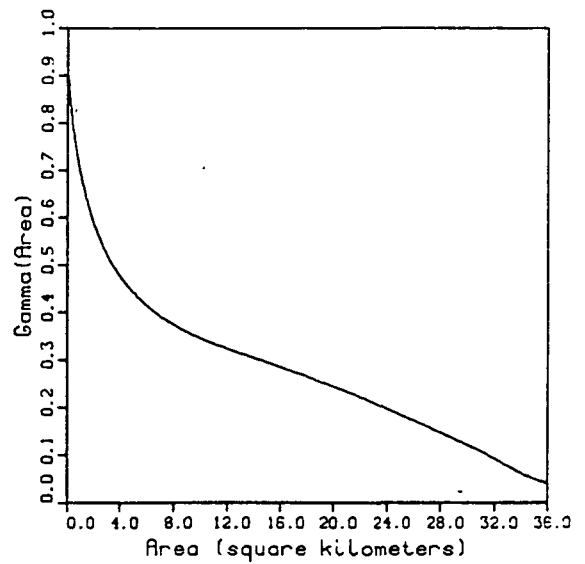
Storm Day
Aug 24, 1974



Spatial Correlation



Variance Function



C-2

Storm Day Aug 24 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.244$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.756$

Expected Value of Point Depth (mm.): $E(Y) = 0.844$

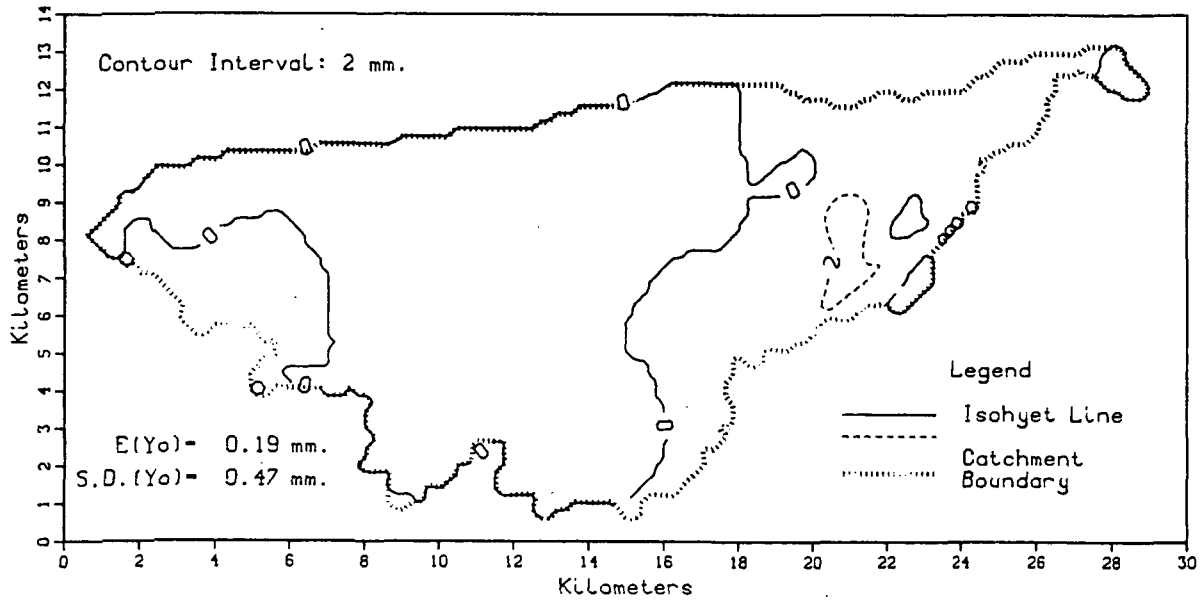
Variance of Point Depth (mm. sq.): $Var(Y) = 0.812$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.215$

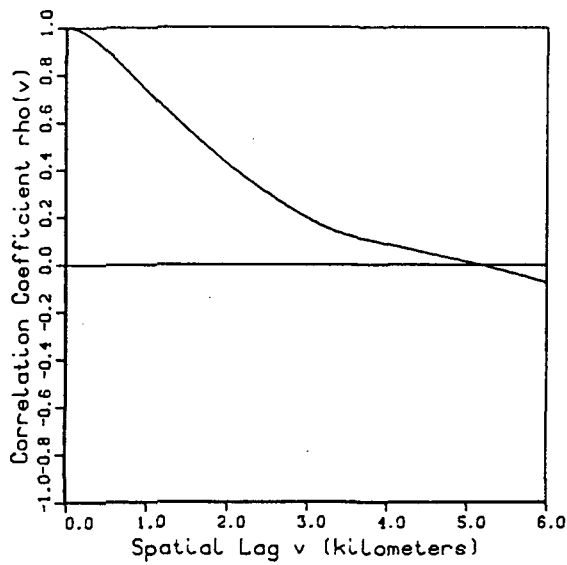
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.355	0.0	1.000	0.00	1.000
2	0.103	0.2	0.986	0.04	0.936
3	0.028	0.4	0.951	0.16	0.873
4	0.006	0.6	0.902	0.36	0.811
5	0.000	0.8	0.843	0.64	0.754
		1.0	0.779	1.00	0.697
		1.2	0.716	1.44	0.643
		1.4	0.656	1.96	0.593
		1.6	0.603	2.56	0.549
		1.8	0.557	3.24	0.510
		2.0	0.518	4.00	0.476
		2.2	0.488	4.84	0.446
		2.4	0.465	5.76	0.420
		2.6	0.449	6.76	0.396
		2.8	0.439	7.84	0.376
		3.0	0.434	9.00	0.357
		3.2	0.432	10.24	0.341
		3.4	0.431	11.56	0.326
		3.6	0.429	12.96	0.312
		3.8	0.424	14.44	0.298
		4.0	0.415	16.00	0.283
		4.2	0.401	17.64	0.266
		4.4	0.381	19.36	0.249
		4.6	0.356	21.16	0.230
		4.8	0.329	23.04	0.208
		5.0	0.299	25.00	0.183
		5.2	0.268	27.04	0.158
		5.4	0.239	29.16	0.131
		5.6	0.217	31.36	0.102
		5.8	0.201	33.64	0.066
		6.0	0.187	36.00	0.040

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

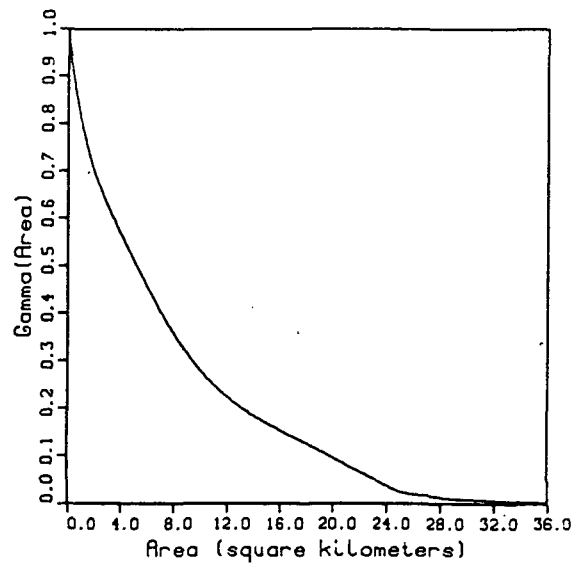
Storm Day
 Aug 25, 1974



Spatial Correlation



Variance Function



Storm Day Aug 25 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.599$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.401$

Expected Value of Point Depth (mm.): $E(Y) = 0.207$

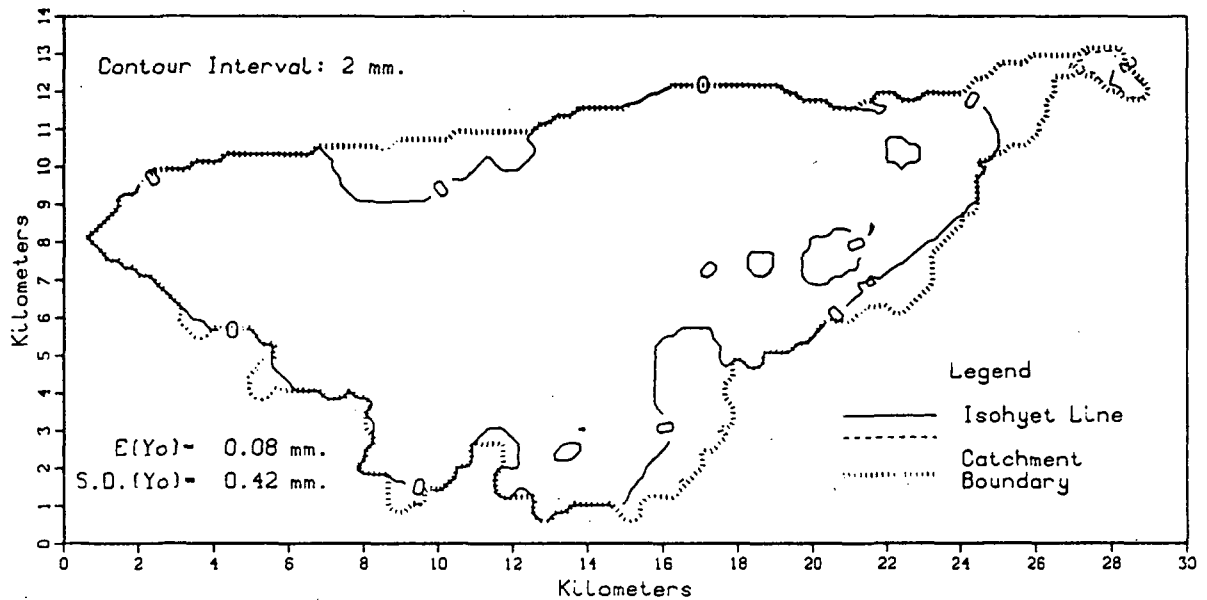
Variance of Point Depth (mm. sq.): $Var(Y) = 0.203$

Coef. of Skewness of Point Depth: $S.C.(Y) = 3.053$

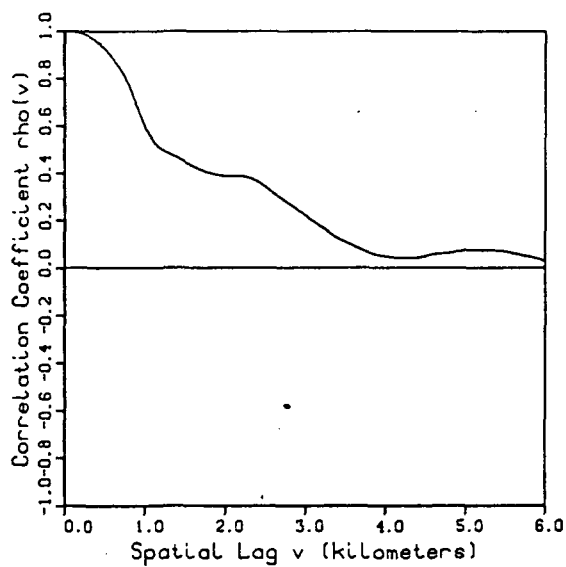
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.060	0.0	1.000	0.00	1.000
2	0.017	0.2	0.980	0.04	0.986
3	0.000	0.4	0.933	0.16	0.958
		0.6	0.870	0.36	0.917
		0.8	0.801	0.64	0.866
		1.0	0.731	1.00	0.811
		1.2	0.663	1.44	0.755
		1.4	0.599	1.96	0.703
		1.6	0.538	2.56	0.658
		1.8	0.478	3.24	0.614
		2.0	0.422	4.00	0.569
		2.2	0.369	4.84	0.521
		2.4	0.319	5.76	0.470
		2.6	0.274	6.76	0.417
		2.8	0.232	7.84	0.365
		3.0	0.193	9.00	0.316
		3.2	0.158	10.24	0.272
		3.4	0.131	11.56	0.235
		3.6	0.112	12.96	0.204
		3.8	0.096	14.44	0.178
		4.0	0.082	16.00	0.154
		4.2	0.067	17.64	0.130
		4.4	0.052	19.36	0.106
		4.6	0.038	21.16	0.079
		4.8	0.023	23.04	0.052
		5.0	0.009	25.00	0.024
		5.2	-0.007	27.04	0.016
		5.4	-0.024	29.16	0.009
		5.6	-0.041	31.36	0.006
		5.8	-0.060	33.64	0.003
		6.0	-0.080	36.00	0.001

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

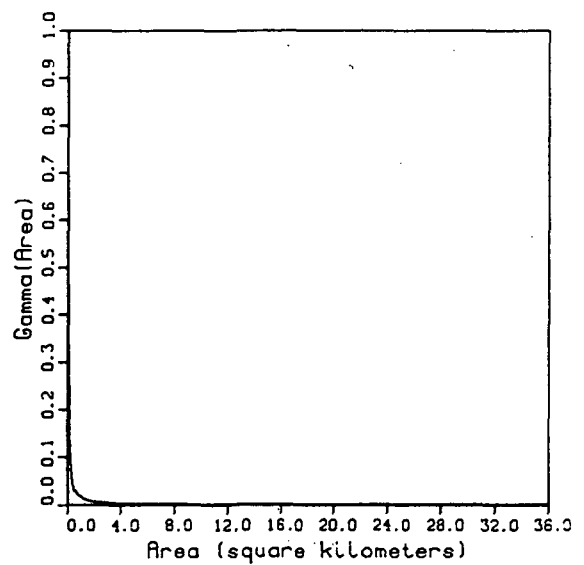
Storm Day
 Sept 1, 1974



Spatial Correlation



Variance Function



Storm Day Sept 1 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.828$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.172$

Expected Value of Point Depth (mm.): $E(Y) = 0.075$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.163$

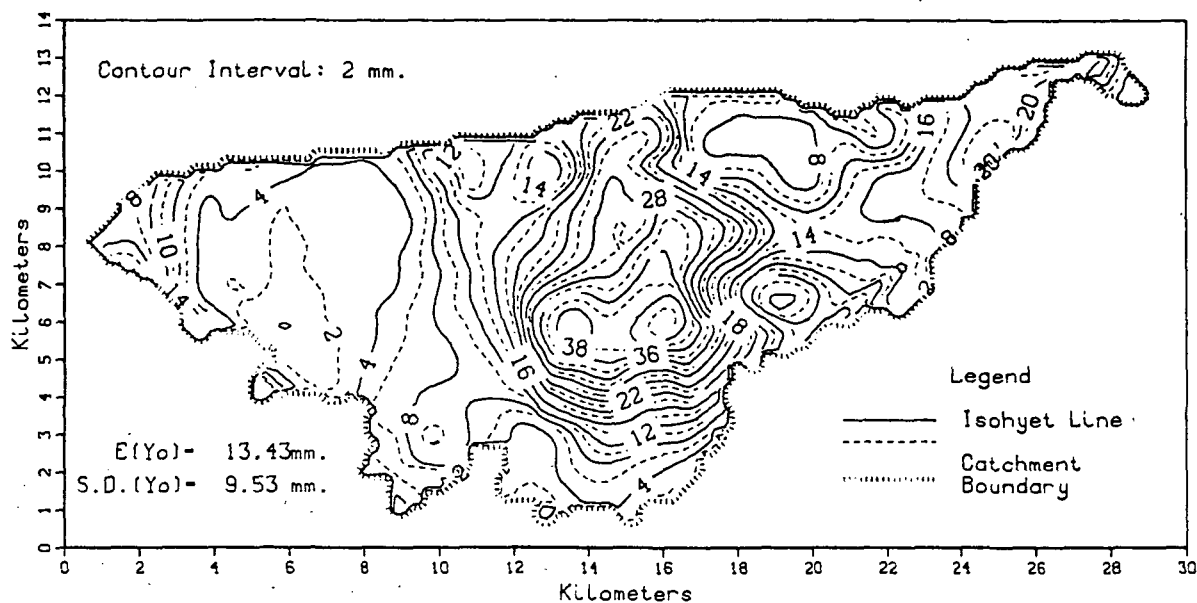
Coef. of Skewness of Point Depth: $S.C.(Y) = 9.175$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.015	0.0	1.000	0.00	1.000
2	0.006	0.2	0.990	0.04	0.567
3	0.005	0.4	0.954	0.16	0.192
4	0.003	0.6	0.882	0.36	0.047
5	0.001	0.8	0.769	0.64	0.028
6	0.000	1.0	0.590	1.00	0.017
7	0.000	1.2	0.500	1.44	0.009
		1.4	0.464	1.96	0.006
		1.6	0.426	2.56	0.005
		1.8	0.397	3.24	0.004
		2.0	0.387	4.00	0.003
		2.2	0.385	4.84	0.002
		2.4	0.363	5.76	0.002
		2.6	0.313	6.76	0.002
		2.8	0.267	7.84	0.001
		3.0	0.219	9.00	0.001
		3.2	0.172	10.24	0.001
		3.4	0.125	11.56	0.001
		3.6	0.092	12.96	0.001
		3.8	0.063	14.44	0.001
		4.0	0.047	16.00	0.001
		4.2	0.041	17.64	0.001
		4.4	0.044	19.36	0.001
		4.6	0.059	21.16	0.001
		4.8	0.066	23.04	0.001
		5.0	0.076	25.00	0.000
		5.2	0.076	27.04	0.000
		5.4	0.073	29.16	0.000
		5.6	0.062	31.36	0.000
		5.8	0.047	33.64	0.000
		6.0	0.029	36.00	0.000

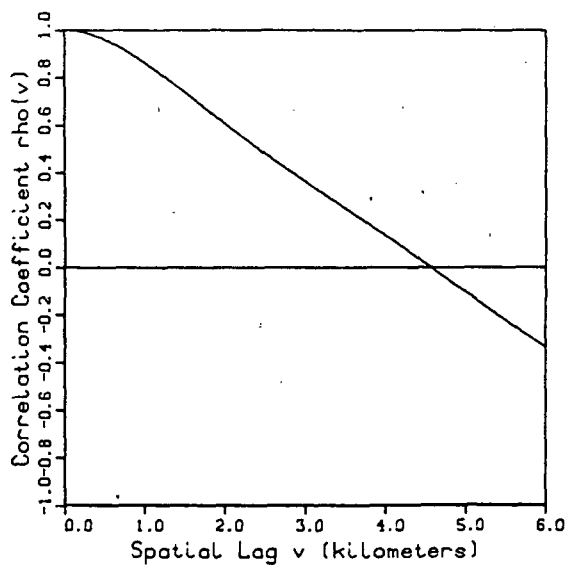
Walnut Gulch, Arizona

Ac=154.21 sq.km.

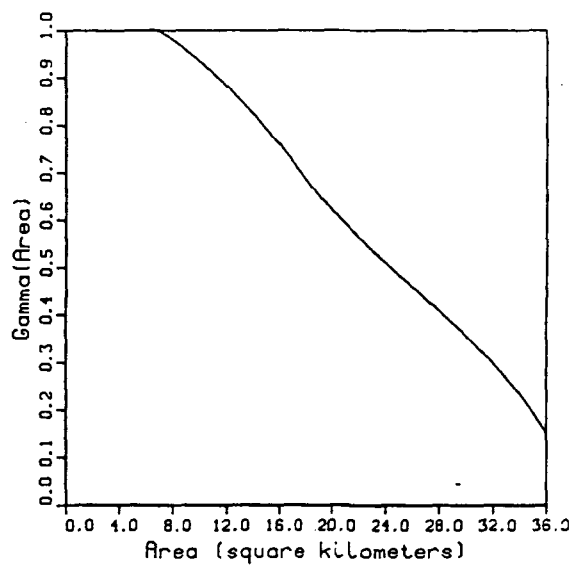
Storm Day
Sept 2, 1974



Spatial Correlation



Variance Function



Storm Day Sept 2 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.003$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.997$

Expected Value of Point Depth (mm.): $E(Y) = 13.582$

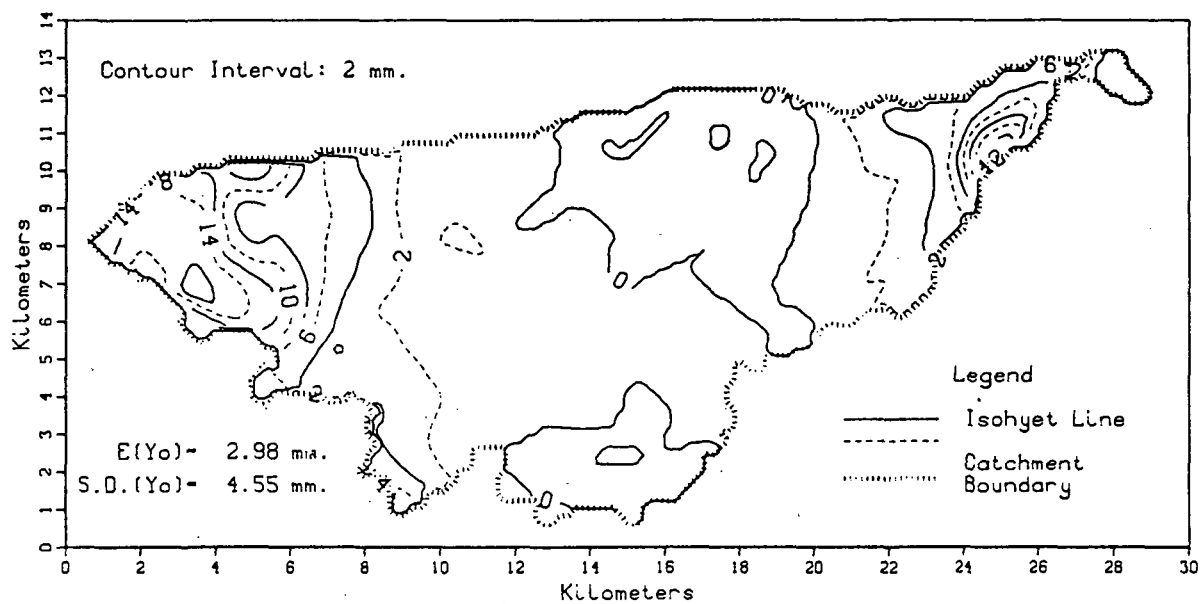
Variance of Point Depth (mm. sq.): $Var(Y)=103.381$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.926$

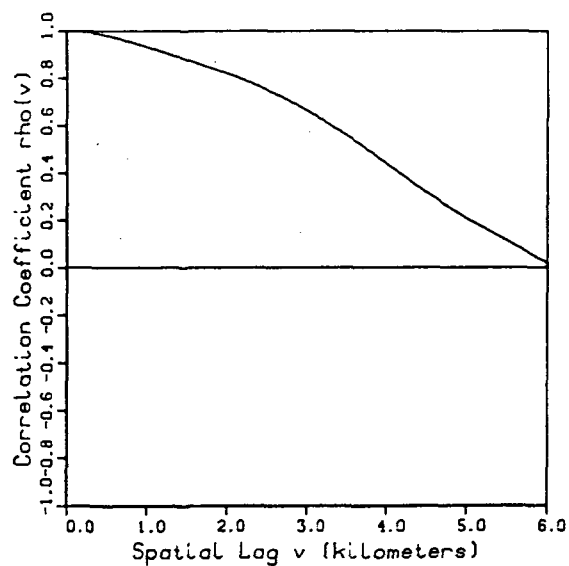
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.984	0.0	1.000	0.00	1.000
3	0.886	0.2	0.993	0.04	1.022
5	0.768	0.4	0.972	0.16	1.041
7	0.688	0.6	0.942	0.36	1.055
9	0.577	0.8	0.904	0.64	1.063
11	0.505	1.0	0.860	1.00	1.068
13	0.443	1.2	0.812	1.44	1.071
15	0.369	1.4	0.762	1.96	1.070
17	0.308	1.6	0.710	2.56	1.065
19	0.254	1.8	0.657	3.24	1.057
21	0.218	2.0	0.604	4.00	1.046
23	0.183	2.2	0.553	4.84	1.034
25	0.158	2.4	0.502	5.76	1.019
27	0.135	2.6	0.453	6.76	1.002
29	0.109	2.8	0.405	7.84	0.981
31	0.088	3.0	0.359	9.00	0.956
33	0.071	3.2	0.313	10.24	0.927
35	0.054	3.4	0.268	11.56	0.893
37	0.038	3.6	0.223	12.96	0.855
39	0.022	3.8	0.177	14.44	0.810
41	0.006	4.0	0.131	16.00	0.758
		4.4	0.037	19.36	0.640
		4.6	-0.011	21.16	0.587
		4.8	-0.059	23.04	0.533
		5.0	-0.108	25.00	0.483
		5.2	-0.156	27.04	0.432
		5.4	-0.204	29.16	0.379
		5.6	-0.250	31.36	0.317
		5.8	-0.295	33.64	0.245
		6.0	-0.339	36.00	0.151

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

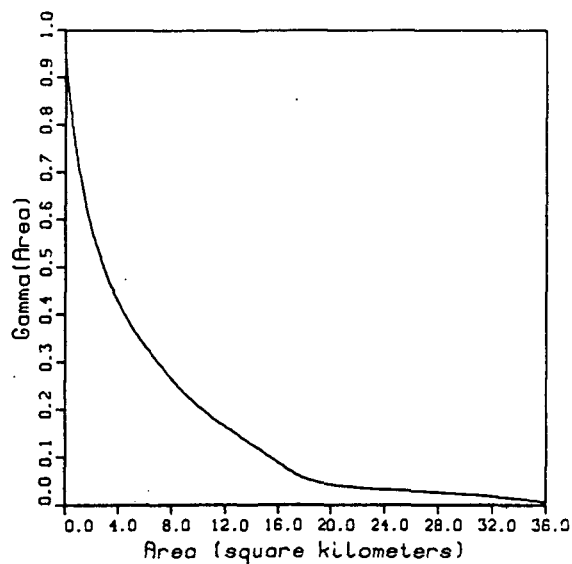
Storm Day
 Sept 3, 1974



Spatial Correlation



Variance Function



Storm Day Sept 3 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.217$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.783$

Expected Value of Point Depth (mm.): $E(Y) = 2.915$

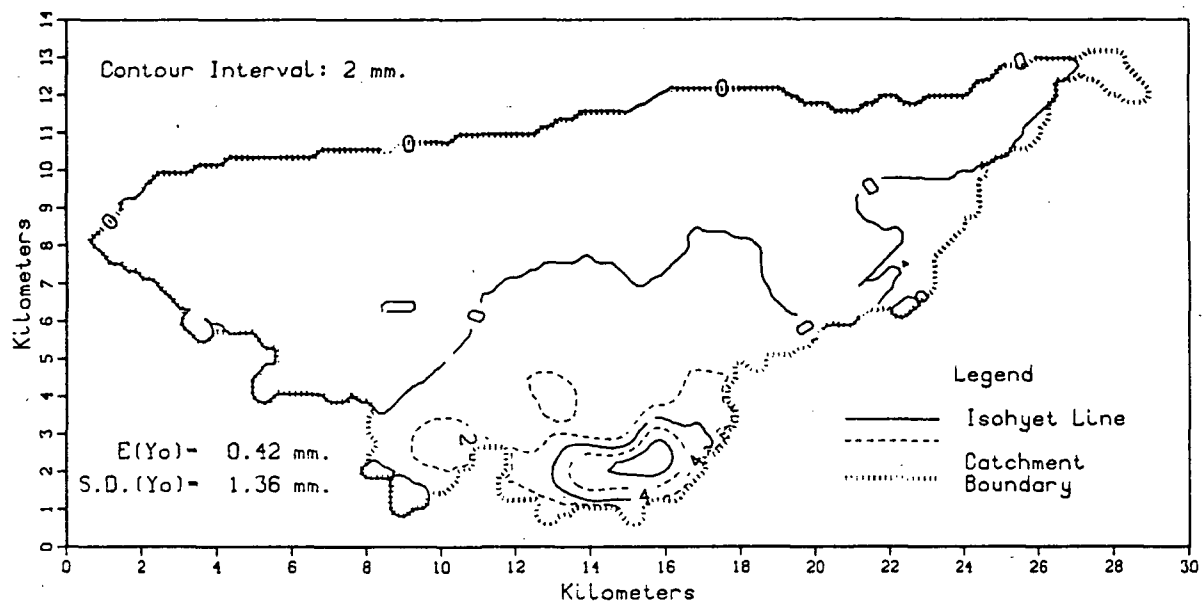
Variance of Point Depth (mm. sq.): $Var(Y) = 17.547$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.751$

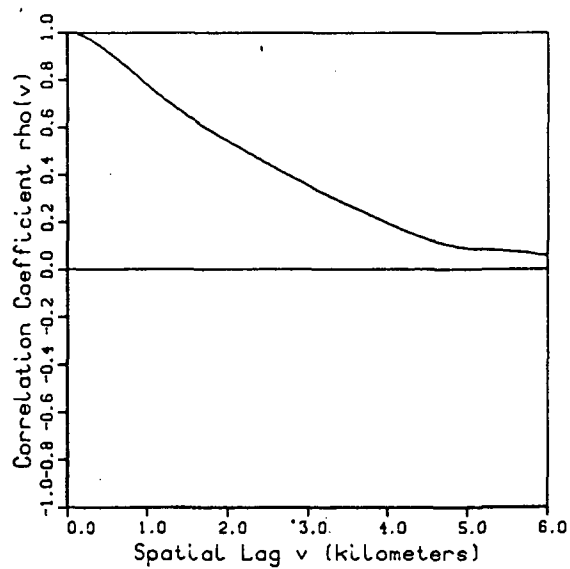
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.504	0.0	1.000	0.00	1.000
2	0.349	0.2	0.996	0.04	0.954
3	0.292	0.4	0.985	0.16	0.902
4	0.226	0.6	0.970	0.36	0.844
5	0.193	0.8	0.951	0.64	0.781
6	0.169	1.0	0.930	1.00	0.714
7	0.148	1.2	0.908	1.44	0.646
8	0.124	1.4	0.886	1.96	0.583
9	0.109	1.6	0.864	2.56	0.527
10	0.097	1.8	0.842	3.24	0.473
11	0.084	2.0	0.818	4.00	0.427
12	0.072	2.2	0.792	4.84	0.383
13	0.059	2.4	0.764	5.76	0.343
14	0.046	2.6	0.733	6.76	0.307
15	0.025	2.8	0.698	7.84	0.269
16	0.007	3.0	0.661	9.00	0.234
17	0.001	3.2	0.622	10.24	0.202
18	0.000	3.4	0.579	11.56	0.172
		3.6	0.535	12.96	0.146
		3.8	0.487	14.44	0.118
		4.0	0.438	16.00	0.087
		4.2	0.388	17.64	0.059
		4.4	0.338	19.36	0.044
		4.6	0.293	21.16	0.038
		4.8	0.249	23.04	0.033
		5.0	0.208	25.00	0.030
		5.2	0.170	27.04	0.027
		5.4	0.132	29.16	0.023
		5.6	0.095	31.36	0.018
		5.8	0.056	33.64	0.012
		6.0	0.019	36.00	0.004

Walnut Gulch, Arizona
Ac=154.21 sq.km.

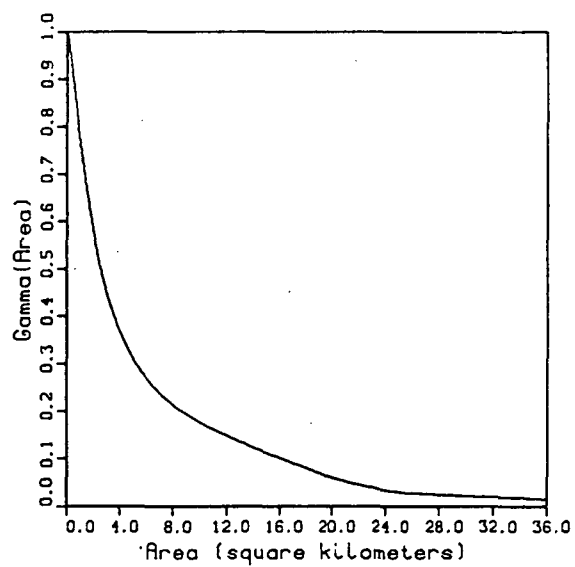
Storm Day
Sept 4, 1974



Spatial Correlation



Variance Function



Storm Day Sept 4 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.619$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.381$

Expected Value of Point Depth (mm.): $E(Y) = 0.540$

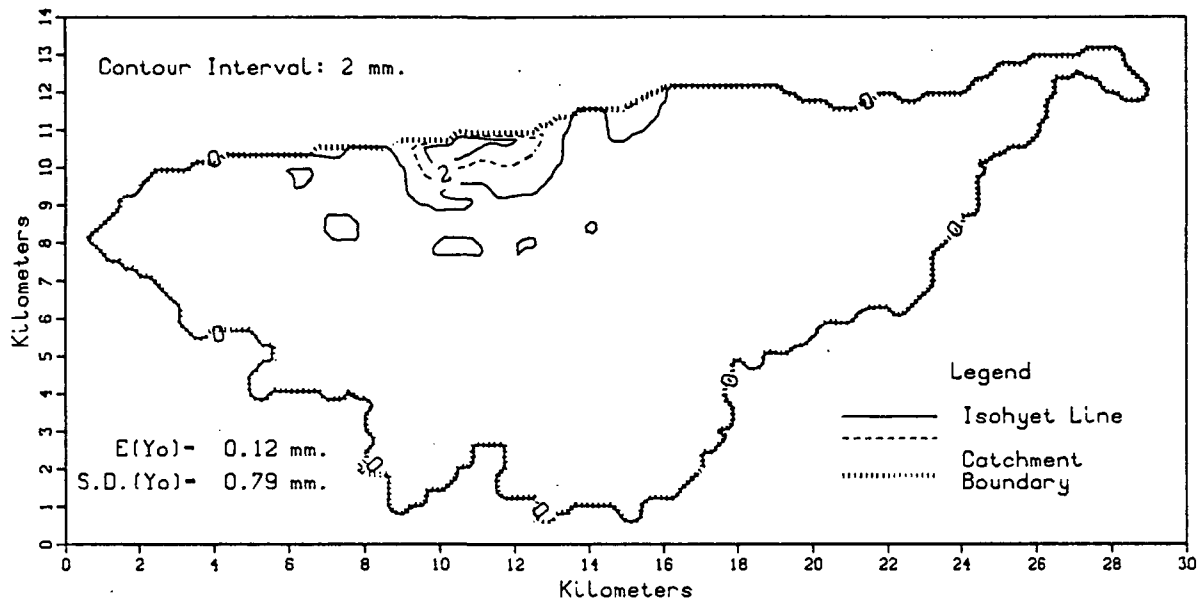
Variance of Point Depth (mm. sq.): $Var(Y) = 1.834$

Coef. of Skewness of Point Depth: $S.C.(Y) = 3.608$

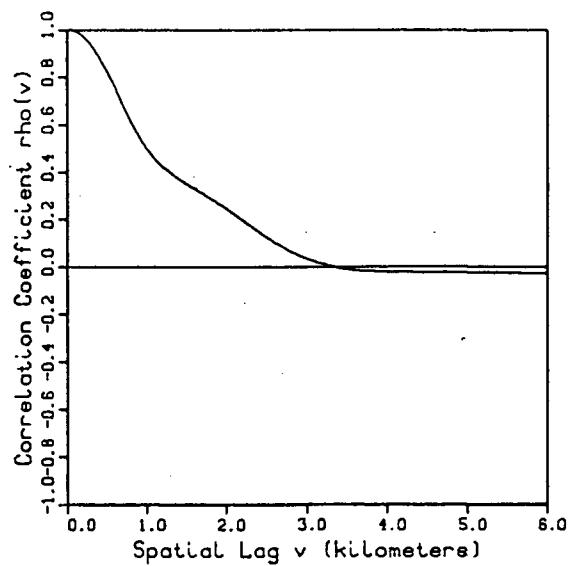
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.157	0.0	1.000	0.00	1.000
2	0.087	0.2	0.985	0.04	1.005
3	0.056	0.4	0.946	0.16	0.987
4	0.037	0.6	0.893	0.36	0.940
5	0.028	0.8	0.835	0.64	0.870
6	0.020	1.0	0.777	1.00	0.782
7	0.013	1.2	0.721	1.44	0.684
8	0.006	1.4	0.670	1.96	0.587
9	0.000	1.6	0.624	2.56	0.498
		1.8	0.581	3.24	0.425
		2.0	0.541	4.00	0.365
		2.2	0.501	4.84	0.317
		2.4	0.463	5.76	0.278
		2.6	0.426	6.76	0.244
		2.8	0.388	7.84	0.215
		3.0	0.352	9.00	0.193
		3.2	0.318	10.24	0.172
		3.4	0.286	11.56	0.153
		3.6	0.255	12.96	0.135
		3.8	0.224	14.44	0.118
		4.0	0.194	16.00	0.100
		4.2	0.164	17.64	0.083
		4.4	0.137	19.36	0.065
		4.6	0.115	21.16	0.050
		4.8	0.099	23.04	0.038
		5.0	0.089	25.00	0.029
		5.2	0.085	27.04	0.026
		5.4	0.080	29.16	0.022
		5.6	0.075	31.36	0.020
		5.8	0.067	33.64	0.017
		6.0	0.057	36.00	0.014

Walnut Gulch, Arizona
Ac=154.21 sq.km.

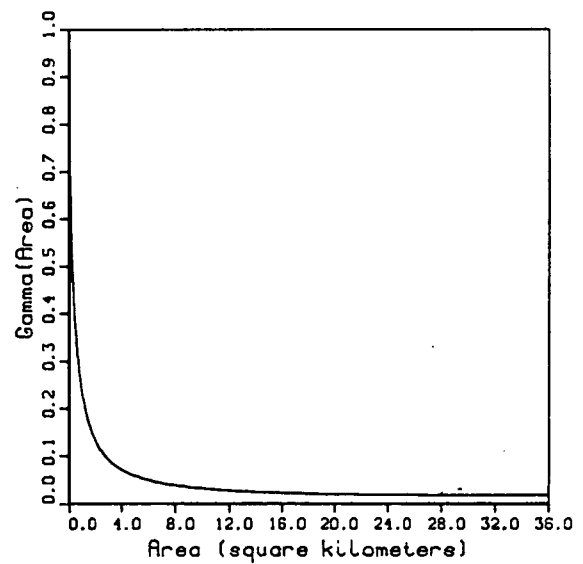
Storm Day
Sept 5, 1974



Spatial Correlation



Variance Function



Storm Day Sept 5 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.926$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.074$

Expected Value of Point Depth (mm.): $E(Y) = 0.072$

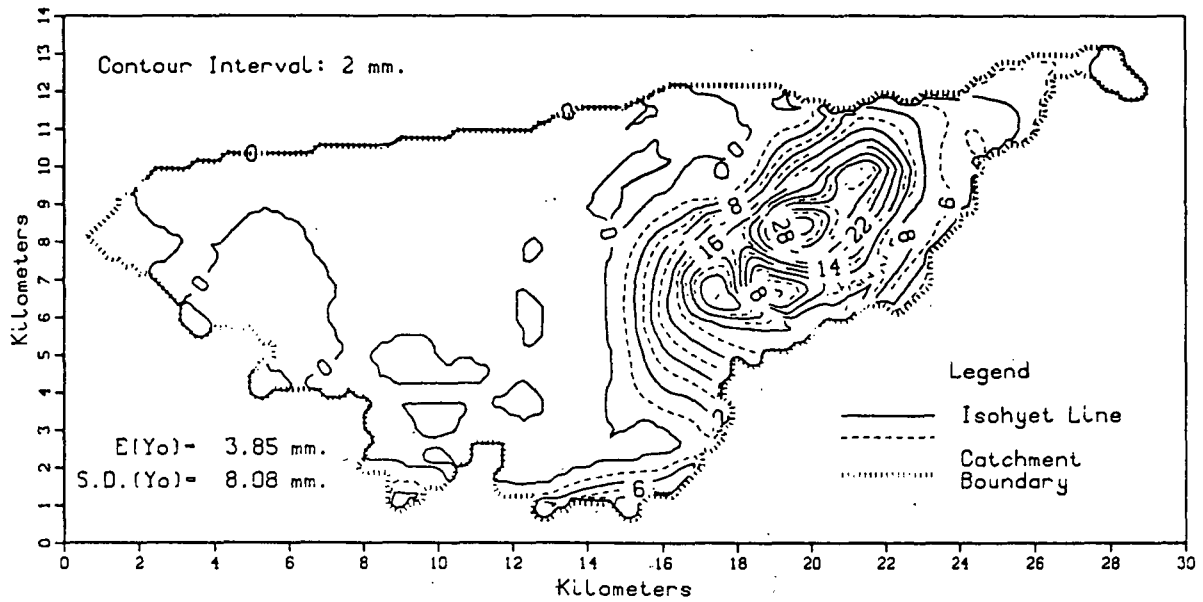
Variance of Point Depth (mm. sq.): $Var(Y) = 0.239$

Coef. of Skewness of Point Depth: $S.C.(Y) = 8.410$

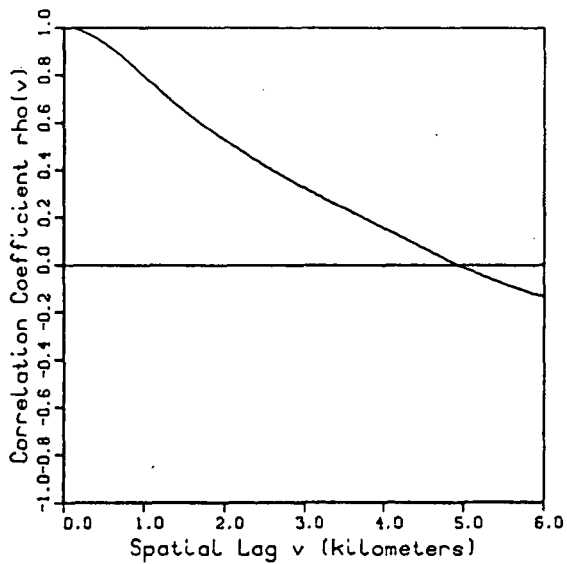
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.021	0.0	1.000	0.00	1.000
2	0.014	0.2	0.972	0.04	0.802
3	0.009	0.4	0.887	0.16	0.614
4	0.005	0.6	0.757	0.36	0.454
5	0.002	0.8	0.616	0.64	0.330
6	0.000	1.0	0.500	1.00	0.241
7	0.000	1.2	0.423	1.44	0.179
		1.4	0.371	1.96	0.137
		1.6	0.329	2.56	0.107
		1.8	0.288	3.24	0.086
		2.0	0.245	4.00	0.070
		2.2	0.196	4.84	0.059
		2.4	0.147	5.76	0.050
		2.6	0.102	6.76	0.044
		2.8	0.064	7.84	0.038
		3.0	0.033	9.00	0.034
		3.2	0.010	10.24	0.030
		3.4	-.006	11.56	0.027
		3.6	-.015	12.96	0.025
		3.8	-.021	14.44	0.023
		4.0	-.023	16.00	0.022
		4.2	-.024	17.64	0.020
		4.4	-.025	19.36	0.019
		4.6	-.026	21.16	0.019
		4.8	-.027	23.04	0.018
		5.0	-.027	25.00	0.018
		5.2	-.028	27.04	0.018
		5.4	-.028	29.16	0.017
		5.6	-.029	31.36	0.017
		5.8	-.029	33.64	0.018
		6.0	-.030	36.00	0.018

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

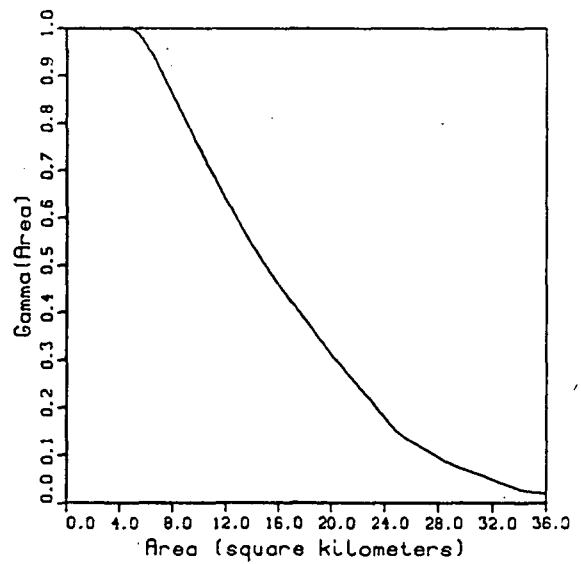
Storm Day
 Sept 6, 1974



Spatial Correlation



Variance Function



Storm Day Sept 6 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.426$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.574$

Expected Value of Point Depth (mm.): $E(Y) = 3.828$

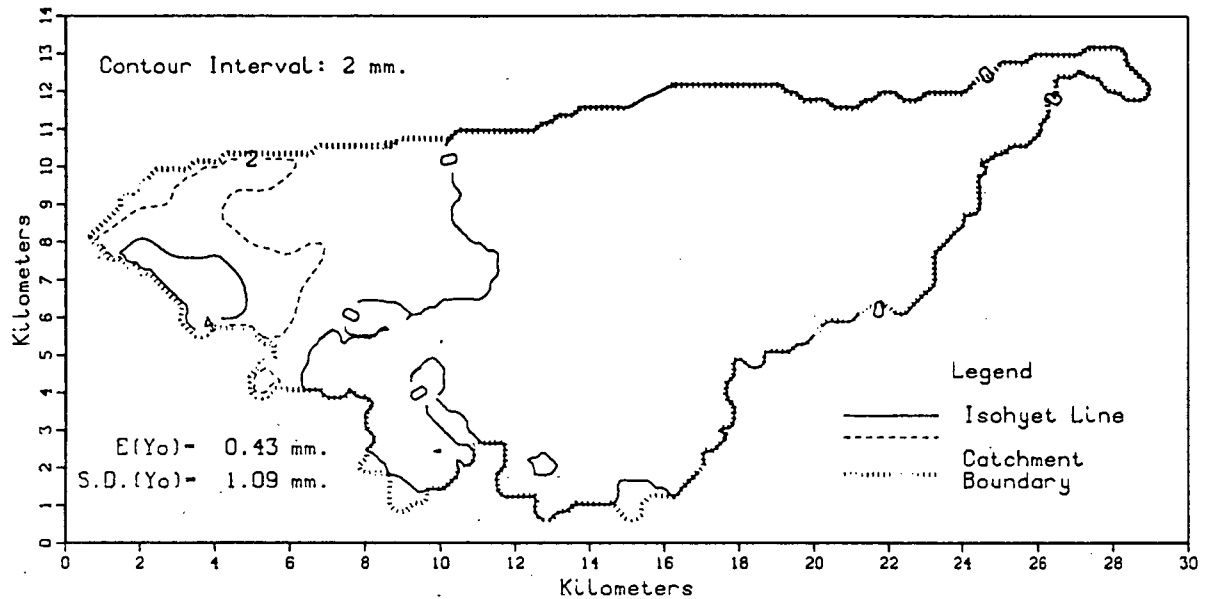
Variance of Point Depth (mm. sq.): $Var(Y) = 50.361$

Coef. of Skewness of Point Depth: $S.C.(Y) = 2.270$

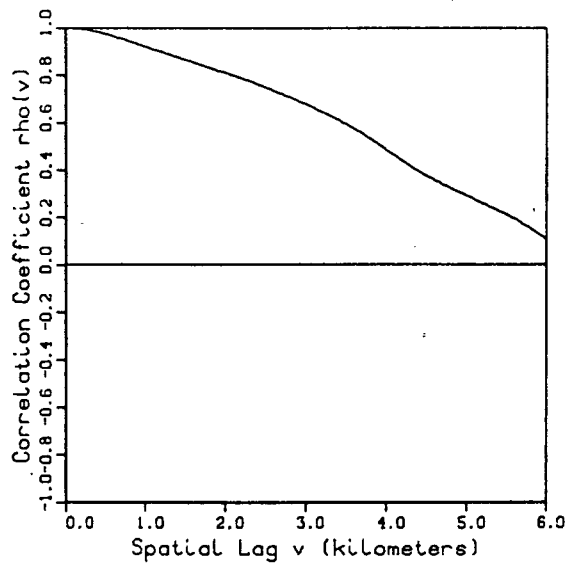
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.348	0.0	1.000	0.00	1.000
2	0.323	0.2	0.988	0.04	1.027
3	0.297	0.4	0.955	0.16	1.050
4	0.274	0.6	0.908	0.36	1.068
5	0.254	0.8	0.852	0.64	1.079
6	0.221	1.0	0.791	1.00	1.087
7	0.198	1.2	0.731	1.44	1.092
8	0.180	1.4	0.673	1.96	1.091
9	0.164	1.6	0.619	2.56	1.083
10	0.148	1.8	0.569	3.24	1.069
11	0.134	2.0	0.523	4.00	1.047
12	0.122	2.2	0.479	4.84	1.016
13	0.112	2.4	0.437	5.76	0.976
14	0.101	2.6	0.396	6.76	0.926
15	0.091	2.8	0.357	7.84	0.868
16	0.080	3.0	0.320	9.00	0.803
17	0.073	3.2	0.285	10.24	0.734
18	0.065	3.4	0.251	11.56	0.662
19	0.061	3.6	0.218	12.96	0.591
20	0.055	3.8	0.185	14.44	0.524
21	0.051	4.0	0.152	16.00	0.459
22	0.046	4.2	0.118	17.64	0.396
23	0.041	4.4	0.084	19.36	0.335
24	0.037	4.6	0.050	21.16	0.273
25	0.032	4.8	0.018	23.04	0.212
26	0.028	5.0	-.014	25.00	0.147
27	0.024	5.2	-.043	27.04	0.111
28	0.021	5.4	-.070	29.16	0.078
29	0.018	5.6	-.095	31.36	0.056
30	0.013	5.8	-.118	33.64	0.031
31	0.010	6.0	-.140	36.00	0.020
32	0.008				
33	0.006				
34	0.005				
35	0.003				
36	0.002				
37	0.000				
38	0.000				

Walnut Gulch, Arizona
 $A_c = 154.21$ sq.km.

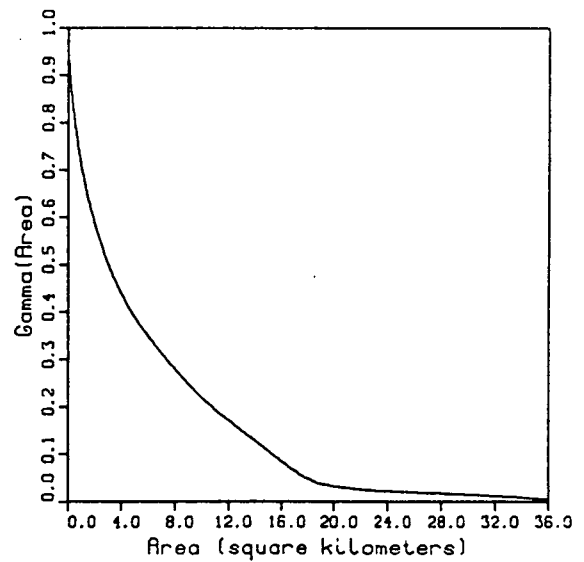
Storm Day
 Sept 9, 1974



Spatial Correlation



Variance Function



Storm Day Sept 9 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.718$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.282$

Expected Value of Point Depth (mm.): $E(Y) = 0.441$

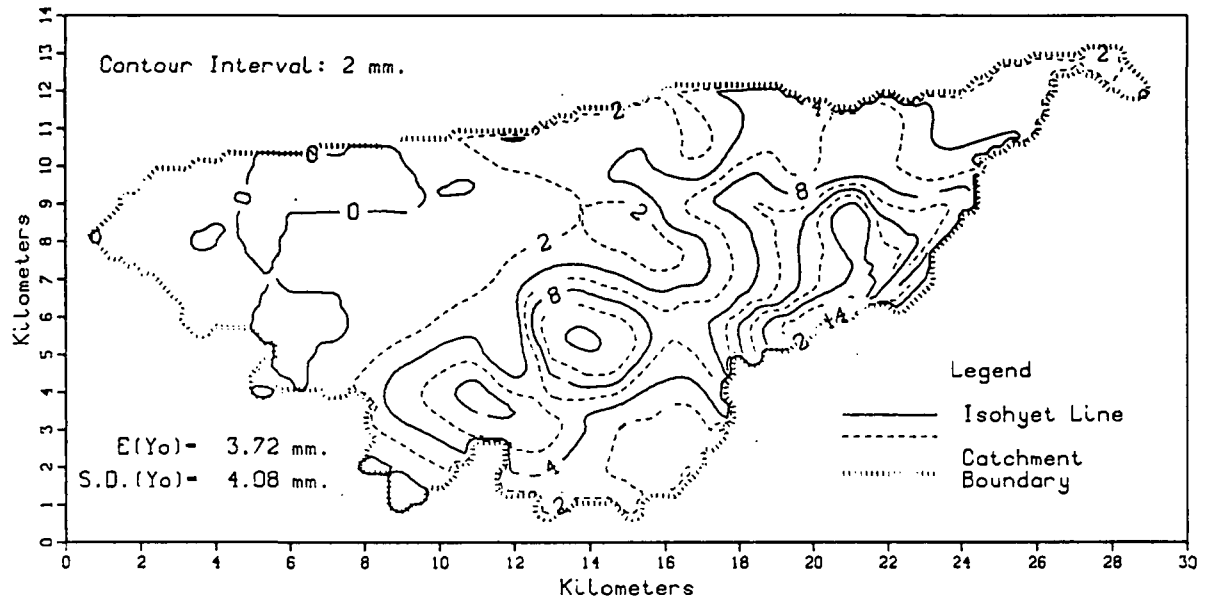
Variance of Point Depth (mm. sq.): $Var(Y) = 1.099$

Coef. of Skewness of Point Depth: $S.C.(Y) = 2.775$

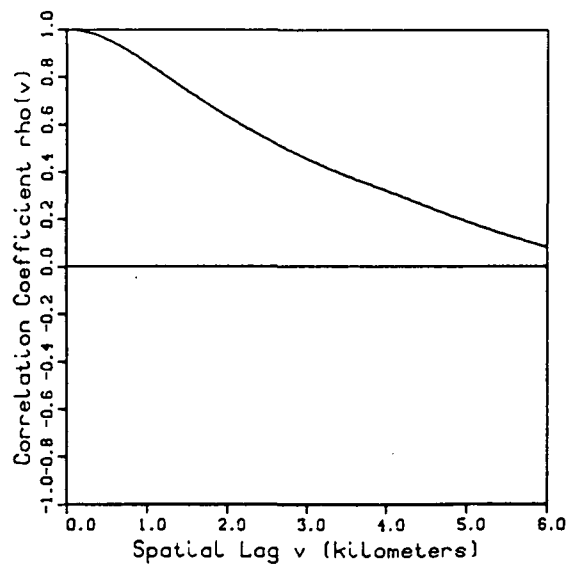
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.166	0.0	1.000	0.00	1.000
2	0.090	0.2	0.994	0.04	0.952
3	0.041	0.4	0.981	0.16	0.897
4	0.023	0.6	0.963	0.36	0.839
5	0.009	0.8	0.941	0.64	0.775
6	0.000	1.0	0.919	1.00	0.709
		1.2	0.896	1.44	0.648
		1.4	0.874	1.96	0.591
		1.6	0.852	2.56	0.536
		1.8	0.830	3.24	0.483
		2.0	0.807	4.00	0.438
		2.2	0.785	4.84	0.395
		2.4	0.760	5.76	0.356
		2.6	0.732	6.76	0.320
		2.8	0.705	7.84	0.283
		3.0	0.676	9.00	0.247
		3.2	0.644	10.24	0.212
		3.4	0.610	11.56	0.180
		3.6	0.572	12.96	0.150
		3.8	0.530	14.44	0.118
		4.0	0.484	16.00	0.084
		4.2	0.436	17.64	0.052
		4.4	0.392	19.36	0.034
		4.6	0.356	21.16	0.028
		4.8	0.321	23.04	0.022
		5.0	0.289	25.00	0.020
		5.2	0.257	27.04	0.018
		5.4	0.226	29.16	0.015
		5.6	0.192	31.36	0.012
		5.8	0.151	33.64	0.008
		6.0	0.105	36.00	0.003

Walnut Gulch, Arizona
Ac=154.21 sq.km.

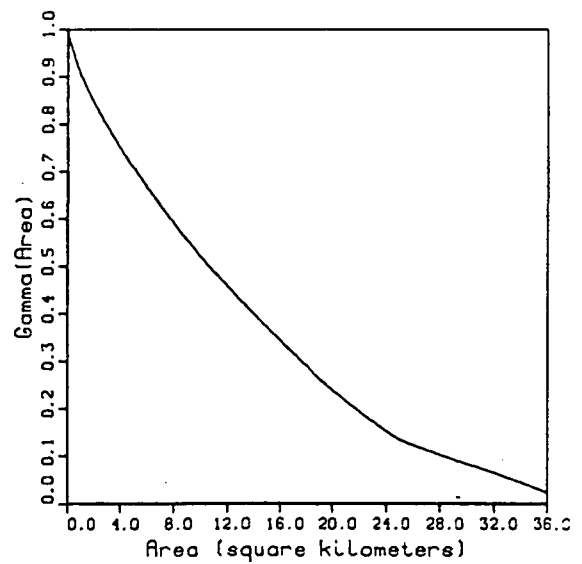
Storm Day
Sept 12, 1974



Spatial Correlation



Variance Function



Storm Day Sept 12 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.070$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.930$

Expected Value of Point Depth (mm.): $E(Y) = 4.212$

Variance of Point Depth (mm. sq.): $Var(Y) = 17.190$

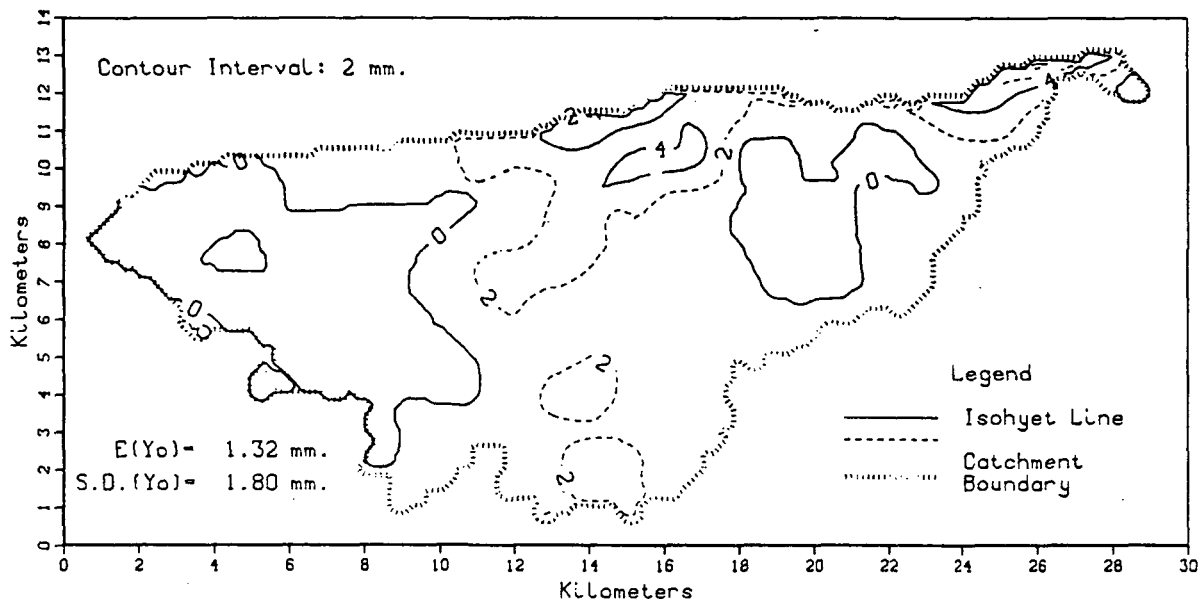
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.261$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.733	0.0	1.000	0.00	1.000
2	0.623	0.2	0.992	0.04	0.993
3	0.501	0.4	0.971	0.16	0.978
4	0.416	0.6	0.940	0.36	0.957
5	0.349	0.8	0.901	0.64	0.931
6	0.276	1.0	0.857	1.00	0.903
7	0.216	1.2	0.810	1.44	0.875
8	0.164	1.4	0.763	1.96	0.846
9	0.131	1.6	0.718	2.56	0.815
10	0.105	1.8	0.674	3.24	0.782
11	0.082	2.0	0.632	4.00	0.747
12	0.061	2.2	0.592	4.84	0.712
13	0.049	2.4	0.554	5.76	0.675
14	0.041	2.6	0.519	6.76	0.636
15	0.032	2.8	0.485	7.84	0.597
16	0.022	3.0	0.453	9.00	0.555
17	0.011	3.2	0.423	10.24	0.514
18	0.005	3.4	0.394	11.56	0.472
19	0.000	3.6	0.368	12.96	0.430
20	0.000	3.8	0.343	14.44	0.388
		4.0	0.318	16.00	0.343
		4.2	0.292	17.64	0.297
		4.4	0.266	19.36	0.253
		4.6	0.240	21.16	0.211
		4.8	0.215	23.04	0.171
		5.0	0.190	25.00	0.134
		5.2	0.166	27.04	0.112
		5.4	0.143	29.16	0.090
		5.6	0.122	31.36	0.070
		5.8	0.101	33.64	0.047
		6.0	0.081	36.00	0.022

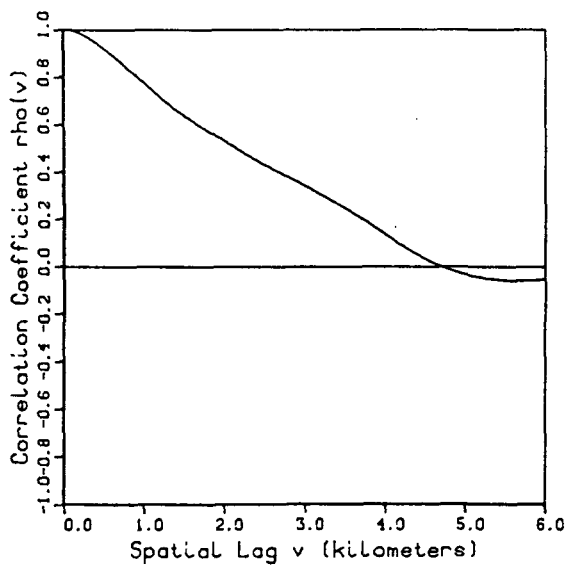
Walnut Gulch, Arizona

Ac=154.21 sq.km.

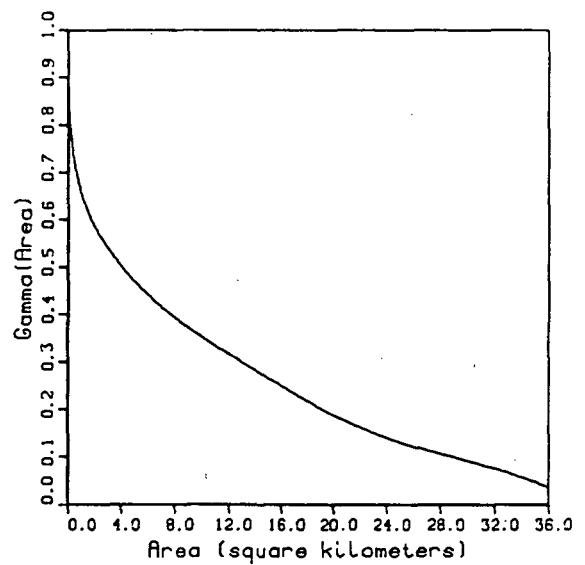
Storm Day
Sept 14, 1974



Spatial Correlation



Variance Function



Storm Day Sept 14 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.291$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.709$

Expected Value of Point Depth (mm.): $E(Y) = 1.057$

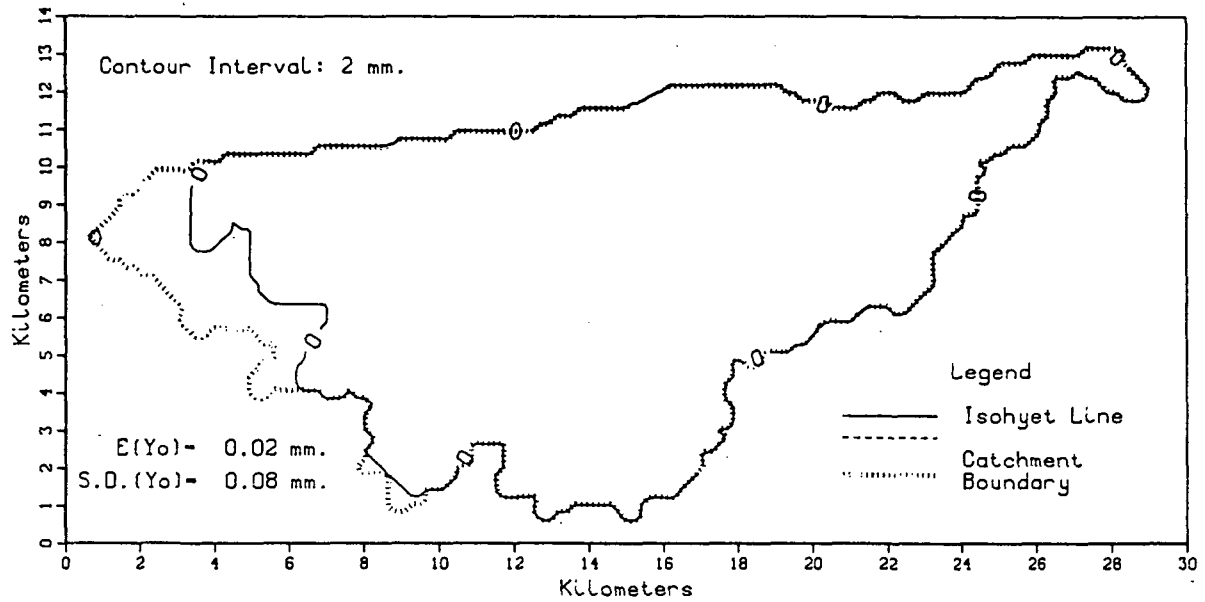
Variance of Point Depth (mm. sq.): $Var(Y) = 1.733$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.639$

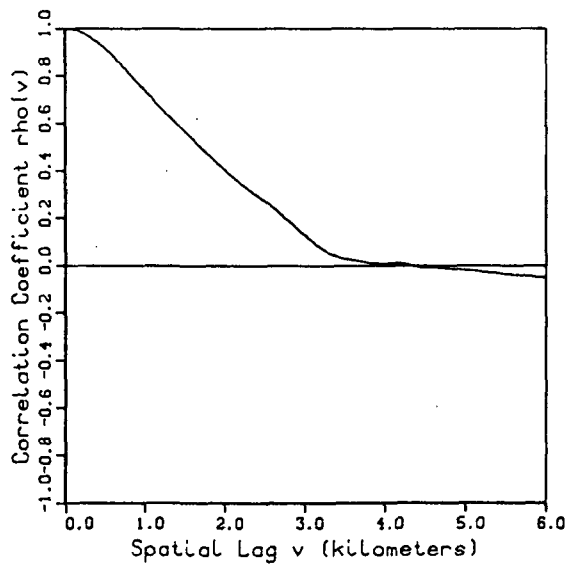
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.382	0.0	1.000	0.00	1.000
2	0.194	0.2	0.984	0.04	0.899
3	0.086	0.4	0.945	0.16	0.812
4	0.035	0.6	0.891	0.36	0.750
5	0.012	0.8	0.832	0.64	0.701
6	0.006	1.0	0.772	1.00	0.659
7	0.002	1.2	0.713	1.44	0.619
8	0.001	1.4	0.658	1.96	0.587
9	0.000	1.6	0.610	2.56	0.558
10	0.000	1.8	0.566	3.24	0.529
		2.0	0.527	4.00	0.500
		2.2	0.484	4.84	0.472
		2.4	0.444	5.76	0.445
		2.6	0.407	6.76	0.419
		2.8	0.372	7.84	0.395
		3.0	0.337	9.00	0.371
		3.2	0.300	10.24	0.347
		3.4	0.261	11.56	0.323
		3.6	0.220	12.96	0.299
		3.8	0.177	14.44	0.274
		4.0	0.130	16.00	0.249
		4.2	0.086	17.64	0.222
		4.4	0.046	19.36	0.196
		4.6	0.012	21.16	0.172
		4.8	-.017	23.04	0.149
		5.0	-.037	25.00	0.129
		5.2	-.051	27.04	0.113
		5.4	-.059	29.16	0.098
		5.6	-.062	31.36	0.080
		5.8	-.060	33.64	0.060
		6.0	-.054	36.00	0.036

Walnut Gulch, Arizona
 $A_c = 154.21$ sq.km.

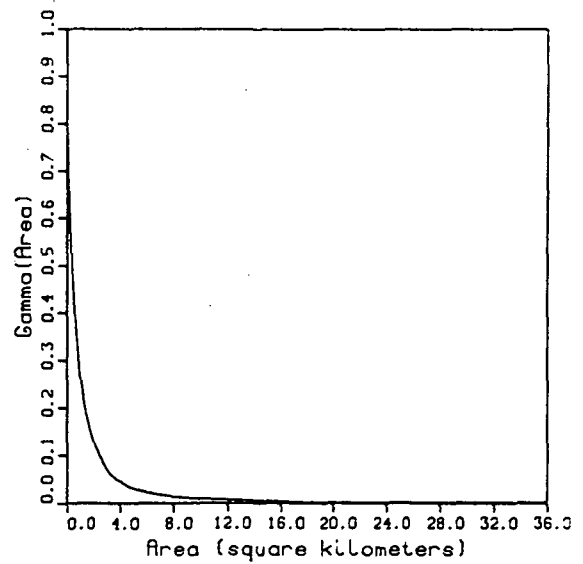
Storm Day
 Sept 15, 1974



Spatial Correlation



Variance Function



Storm Day Sept 15 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.918$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.082$

Expected Value of Point Depth (mm.): $E(Y) = 0.017$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.005$

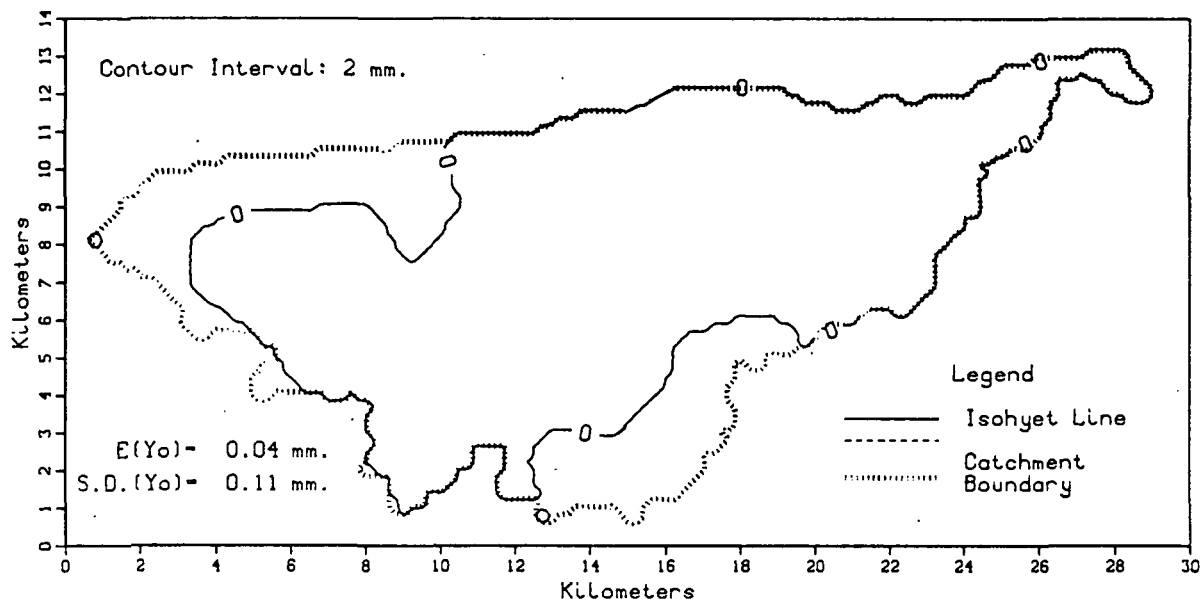
Coef. of Skewness of Point Depth: $S.C.(Y) = 4.569$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.982	0.04	0.823
		0.4	0.942	0.16	0.657
		0.6	0.882	0.36	0.509
		0.8	0.809	0.64	0.379
		1.0	0.734	1.00	0.270
		1.2	0.661	1.44	0.189
		1.4	0.596	1.96	0.134
		1.6	0.532	2.56	0.093
		1.8	0.463	3.24	0.061
		2.0	0.403	4.00	0.045
		2.2	0.345	4.84	0.032
		2.4	0.293	5.76	0.024
		2.6	0.246	6.76	0.018
		2.8	0.186	7.84	0.013
		3.0	0.127	9.00	0.010
		3.2	0.074	10.24	0.008
		3.4	0.035	11.56	0.006
		3.6	0.021	12.96	0.005
		3.8	0.010	14.44	0.004
		4.0	0.007	16.00	0.002
		4.2	0.010	17.64	0.001
		4.4	-.008	19.36	0.000
		4.6	-.011	21.16	0.000
		4.8	-.015	23.04	0.000
		5.0	-.022	25.00	0.000
		5.2	-.029	27.04	0.000
		5.4	-.036	29.16	0.000
		5.6	-.043	31.36	0.000
		5.8	-.049	33.64	0.000
		6.0	-.054	36.00	0.000

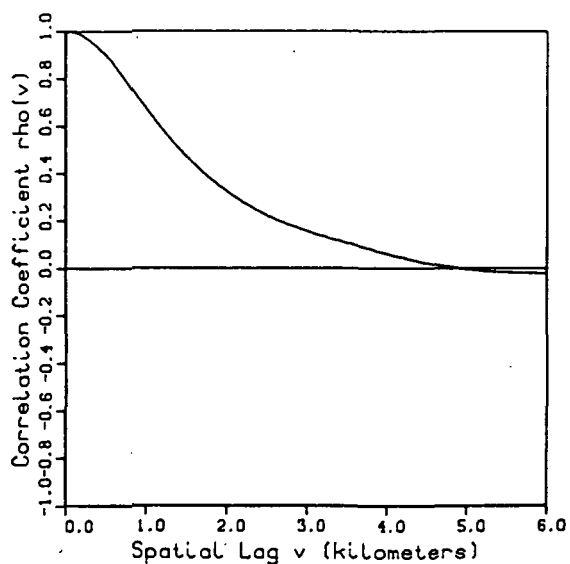
Walnut Gulch, Arizona

Ac=154.21 sq.km.

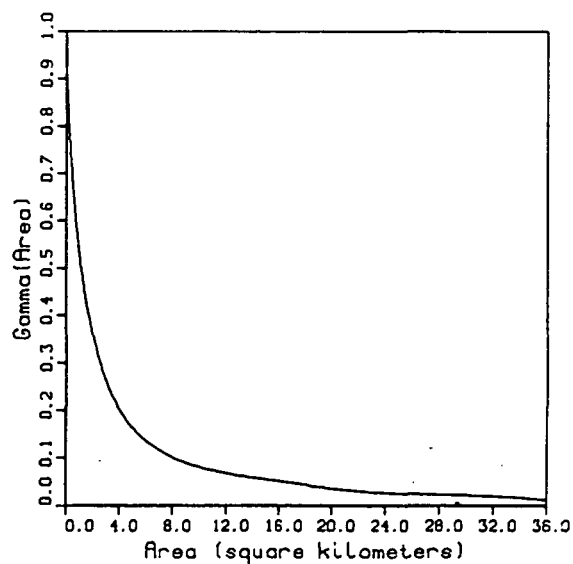
Storm Day
Sept 16, 1974



Spatial Correlation



Variance Function



Storm Day Sept 16 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.780$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.220$

Expected Value of Point Depth (mm.): $E(Y) = 0.036$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.007$

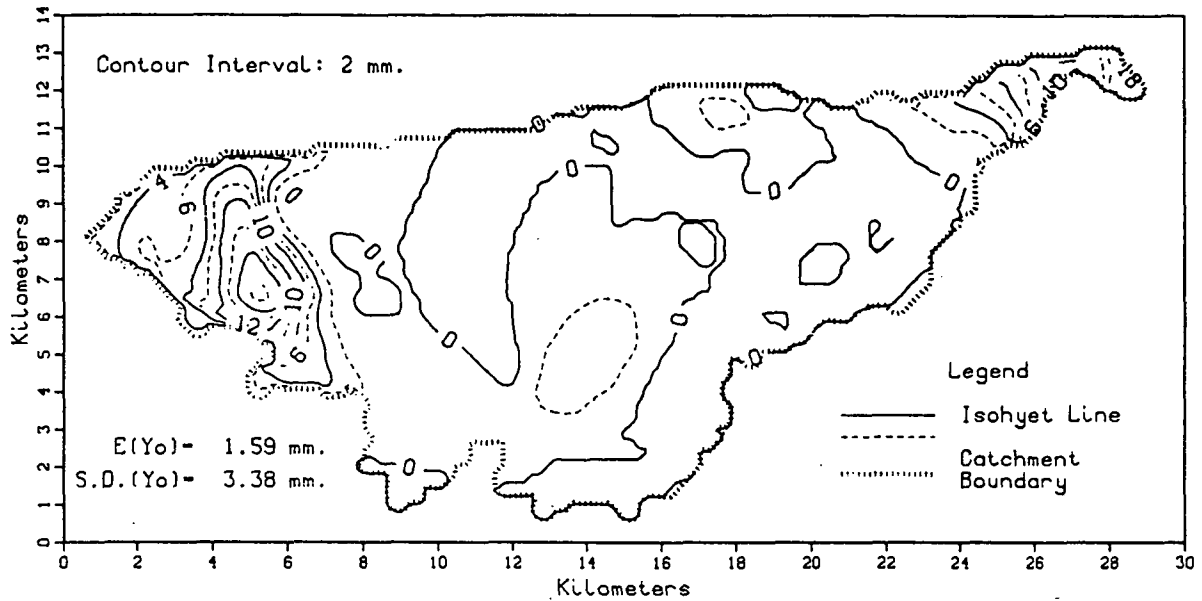
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.554$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.982	0.04	0.920
		0.4	0.932	0.16	0.830
		0.6	0.857	0.36	0.730
		0.8	0.766	0.64	0.629
		1.0	0.672	1.00	0.530
		1.2	0.583	1.44	0.440
		1.4	0.504	1.96	0.363
		1.6	0.434	2.56	0.297
		1.8	0.373	3.24	0.243
		2.0	0.321	4.00	0.201
		2.2	0.275	4.84	0.167
		2.4	0.235	5.76	0.141
		2.6	0.203	6.76	0.120
		2.8	0.175	7.84	0.102
		3.0	0.152	9.00	0.089
		3.2	0.130	10.24	0.078
		3.4	0.111	11.56	0.069
		3.6	0.094	12.96	0.062
		3.8	0.076	14.44	0.056
		4.0	0.058	16.00	0.051
		4.2	0.041	17.64	0.044
		4.4	0.025	19.36	0.037
		4.6	0.013	21.16	0.032
		4.8	0.003	23.04	0.027
		5.0	-.006	25.00	0.025
		5.2	-.014	27.04	0.023
		5.4	-.018	29.16	0.021
		5.6	-.020	31.36	0.019
		5.8	-.023	33.64	0.016
		6.0	-.025	36.00	0.010

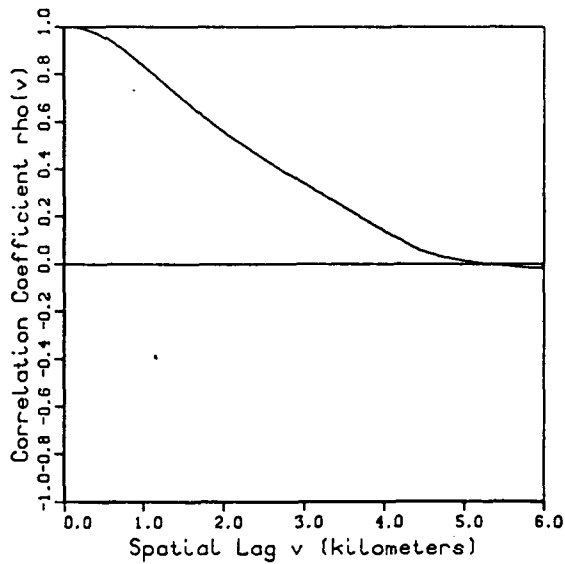
Walnut Gulch, Arizona

Ac=154.21 sq.km.

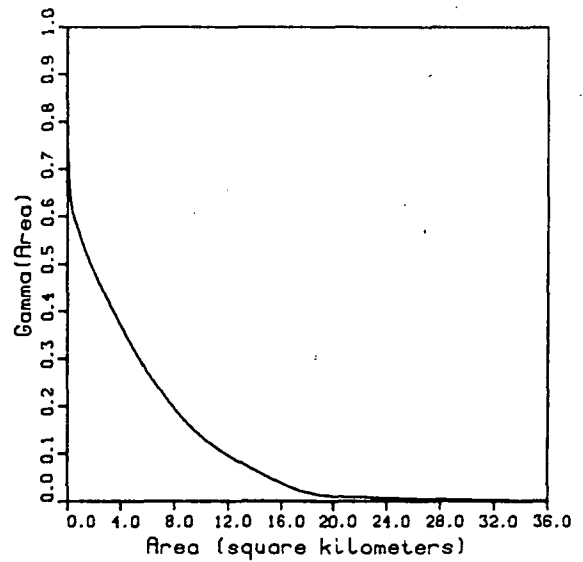
Storm Day
Sept 18, 1974



Spatial Correlation



Variance Function



Storm Day Sept 18 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.363$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.637$

Expected Value of Point Depth (mm.): $E(Y) = 1.858$

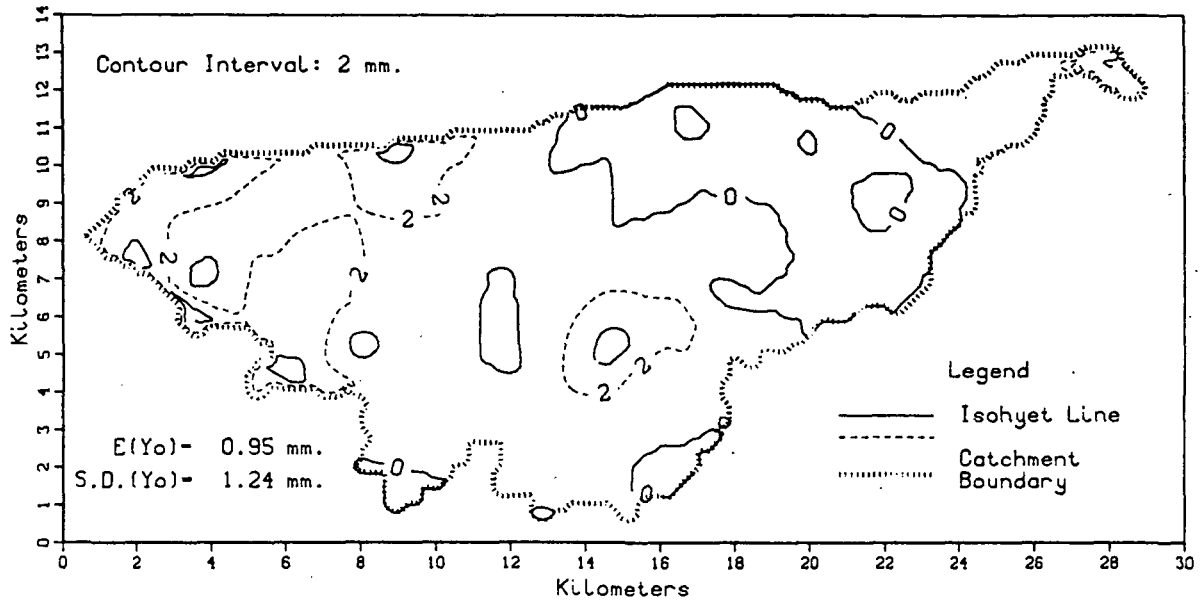
Variance of Point Depth (mm. sq.): $Var(Y) = 16.355$

Coef. of Skewness of Point Depth: $S.C.(Y) = 3.594$

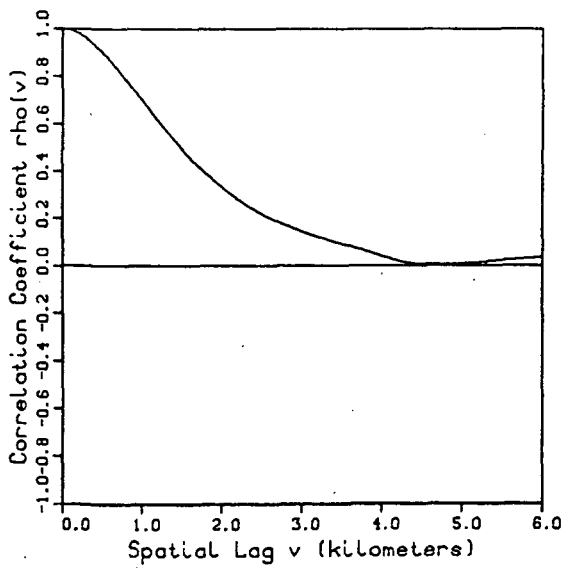
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.289	0.0	1.000	0.00	1.000
2	0.212	0.2	0.993	0.04	0.839
3	0.167	0.4	0.972	0.16	0.687
4	0.141	0.6	0.936	0.36	0.613
5	0.125	0.8	0.890	0.64	0.586
6	0.101	1.0	0.834	1.00	0.556
7	0.085	1.2	0.777	1.44	0.522
8	0.073	1.4	0.720	1.96	0.488
9	0.063	1.6	0.662	2.56	0.451
10	0.054	1.8	0.607	3.24	0.411
11	0.046	2.0	0.556	4.00	0.369
12	0.038	2.2	0.509	4.84	0.326
13	0.031	2.4	0.464	5.76	0.282
14	0.024	2.6	0.421	6.76	0.240
15	0.019	2.8	0.379	7.84	0.199
16	0.015	3.0	0.338	9.00	0.163
17	0.011	3.2	0.297	10.24	0.131
18	0.007	3.4	0.256	11.56	0.103
19	0.006	3.6	0.216	12.96	0.081
20	0.006	3.8	0.175	14.44	0.059
21	0.006	4.0	0.137	16.00	0.037
22	0.005	4.2	0.100	17.64	0.019
23	0.005	4.4	0.063	19.36	0.011
24	0.005	4.6	0.039	21.16	0.009
25	0.004	4.8	0.022	23.04	0.006
26	0.004	5.0	0.011	25.00	0.005
27	0.003	5.2	0.001	27.04	0.004
28	0.003	5.4	-0.006	29.16	0.003
29	0.002	5.6	-0.013	31.36	0.002
30	0.002	5.8	-0.017	33.64	0.001
31	0.002	6.0	-0.019	36.00	0.000
32	0.001				
33	0.001				
34	0.001				
35	0.001				
36	0.000				
37	0.000				
38	0.000				

Walnut Gulch, Arizona
 $A_c = 154.21$ sq.km.

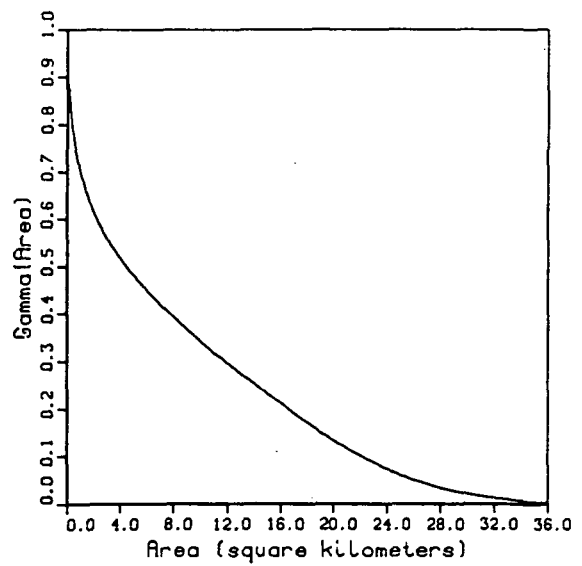
Storm Day
 Sept 19, 1974



Spatial Correlation



Variance Function



Storm Day Sept 19 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.220$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.780$

Expected Value of Point Depth (mm.): $E(Y) = 0.995$

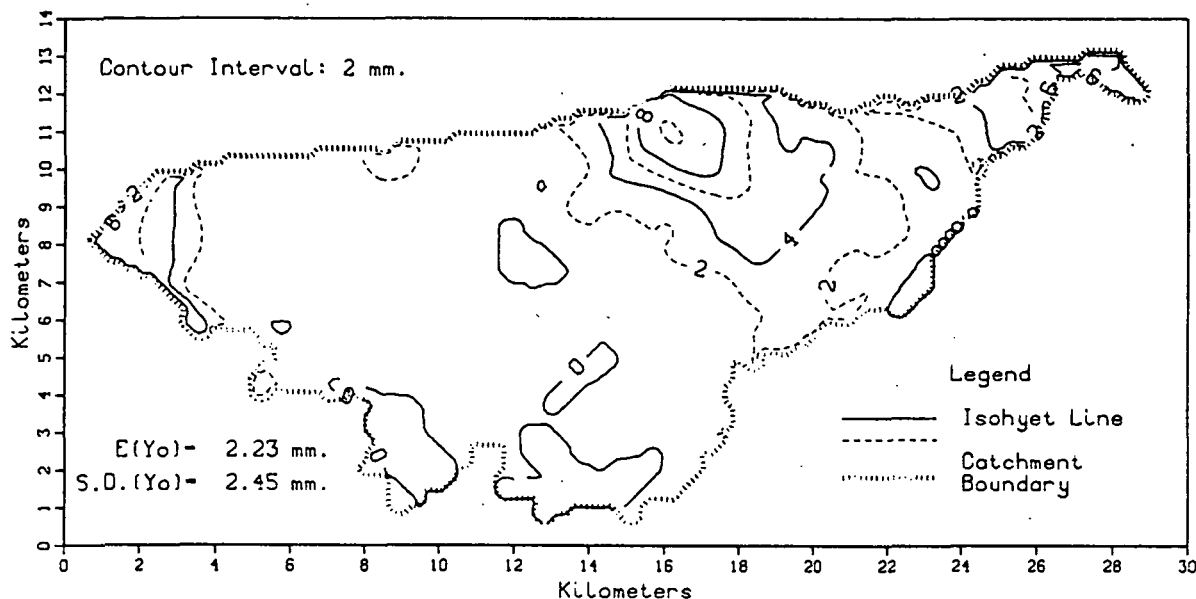
Variance of Point Depth (mm. sq.): $Var(Y) = 1.238$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.164$

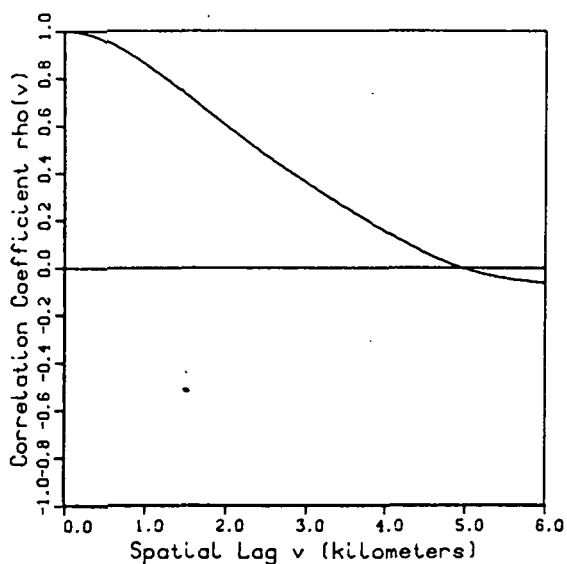
Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	0.382	0.0	1.000	0.00	1.000
2	0.181	0.2	0.982	0.04	0.934
3	0.079	0.4	0.934	0.16	0.865
4	0.015	0.6	0.866	0.36	0.804
5	0.000	0.8	0.786	0.64	0.752
		1.0	0.701	1.00	0.703
		1.2	0.615	1.44	0.659
		1.4	0.534	1.96	0.620
		1.6	0.460	2.56	0.583
		1.8	0.393	3.24	0.548
		2.0	0.334	4.00	0.517
		2.2	0.282	4.84	0.487
		2.4	0.239	5.76	0.457
		2.6	0.203	6.76	0.427
		2.8	0.172	7.84	0.397
		3.0	0.145	9.00	0.367
		3.2	0.122	10.24	0.336
		3.4	0.101	11.56	0.305
		3.6	0.082	12.96	0.274
		3.8	0.062	14.44	0.243
		4.0	0.041	16.00	0.210
		4.2	0.021	17.64	0.176
		4.4	0.008	19.36	0.144
		4.6	0.005	21.16	0.114
		4.8	0.005	23.04	0.086
		5.0	0.009	25.00	0.059
		5.2	0.013	27.04	0.041
		5.4	0.020	29.16	0.025
		5.6	0.026	31.36	0.015
		5.8	0.032	33.64	0.007
		6.0	0.038	36.00	0.001

Walnut Gulch, Arizona
Ac=154.21 sq.km.

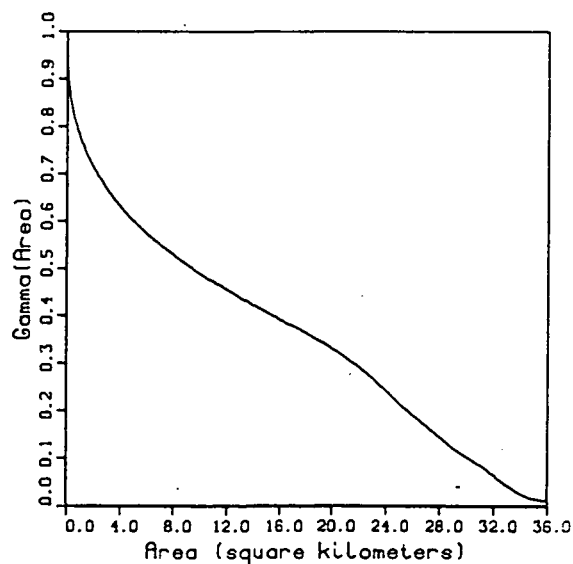
Storm Day
Sept 20, 1974



Spatial Correlation



Variance Function



Storm Day Sept 20 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.065$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.935$

Expected Value of Point Depth (mm.): $E(Y) = 1.871$

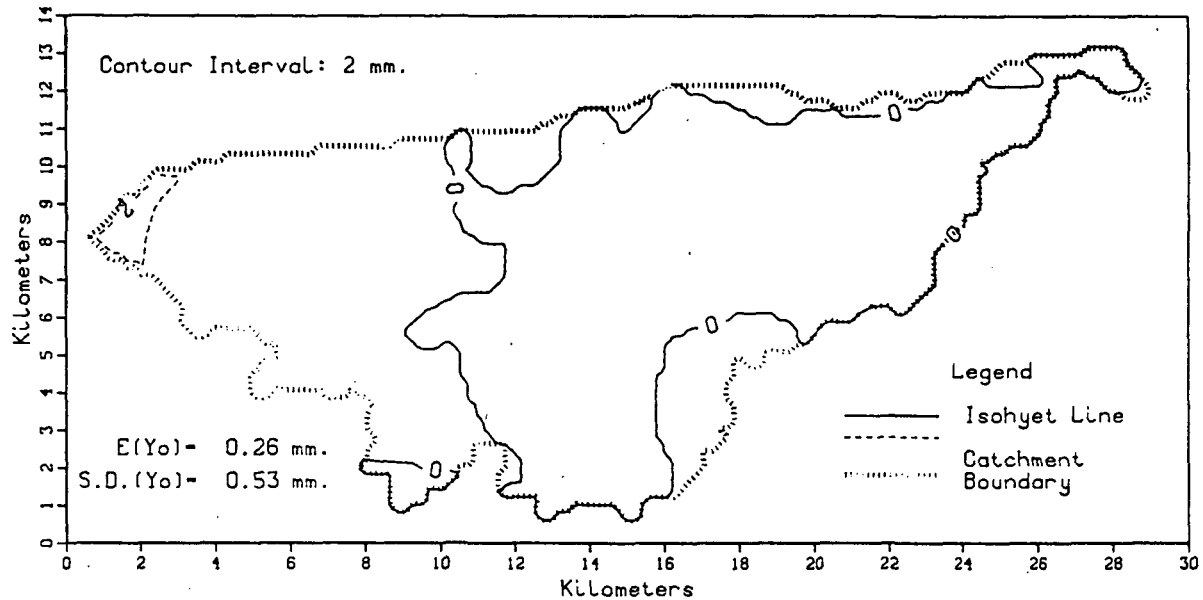
Variance of Point Depth (mm. sq.): $Var(Y) = 4.720$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.603$

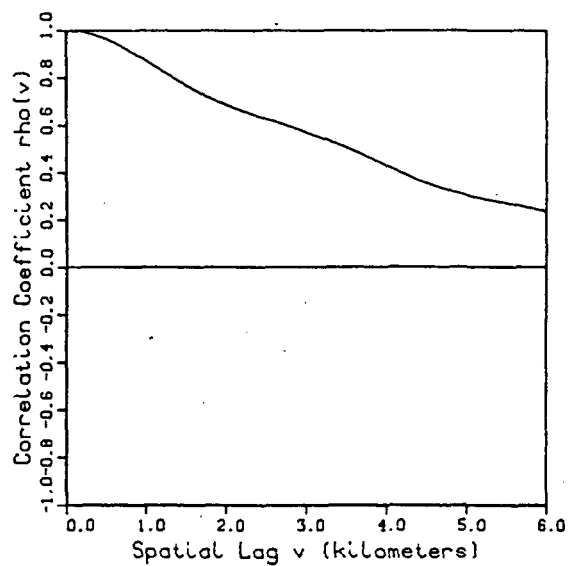
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.485	0.0	1.000	0.00	1.000
2	0.308	0.2	0.992	0.04	0.943
3	0.227	0.4	0.971	0.16	0.888
4	0.154	0.6	0.941	0.36	0.845
5	0.101	0.8	0.903	0.64	0.812
6	0.067	1.0	0.858	1.00	0.778
7	0.040	1.2	0.809	1.44	0.744
8	0.026	1.4	0.758	1.96	0.714
9	0.013	1.6	0.705	2.56	0.686
10	0.002	1.8	0.652	3.24	0.657
11	0.000	2.0	0.599	4.00	0.630
		2.2	0.548	4.84	0.604
		2.4	0.498	5.76	0.579
		2.6	0.449	6.76	0.555
		2.8	0.402	7.84	0.531
		3.0	0.357	9.00	0.508
		3.2	0.313	10.24	0.483
		3.4	0.271	11.56	0.462
		3.6	0.230	12.96	0.439
		3.8	0.190	14.44	0.416
		4.0	0.151	16.00	0.391
		4.2	0.113	17.64	0.368
		4.4	0.076	19.36	0.341
		4.6	0.044	21.16	0.308
		4.8	0.016	23.04	0.267
		5.0	-.007	25.00	0.215
		5.2	-.026	27.04	0.167
		5.4	-.041	29.16	0.118
		5.6	-.052	31.36	0.079
		5.8	-.060	33.64	0.031
		6.0	-.066	36.00	0.012

Walnut Gulch, Arizona
 $A_c = 154.21$ sq.km.

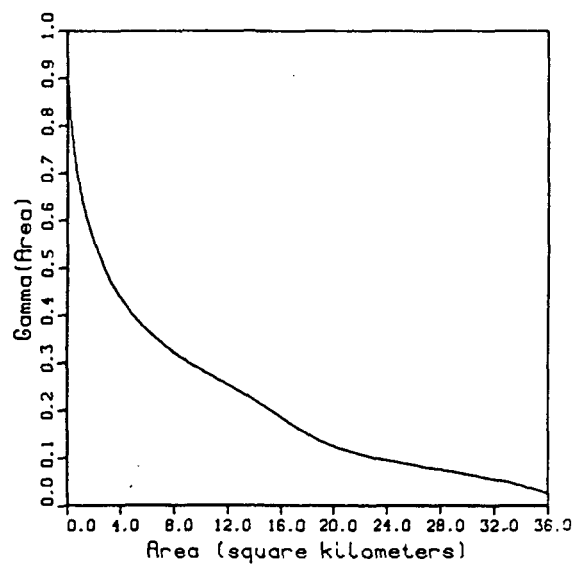
Storm Day
 Sept 21, 1974



Spatial Correlation



Variance Function



Storm Day Sept 21 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.563$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.437$

Expected Value of Point Depth (mm.): $E(Y) = 0.264$

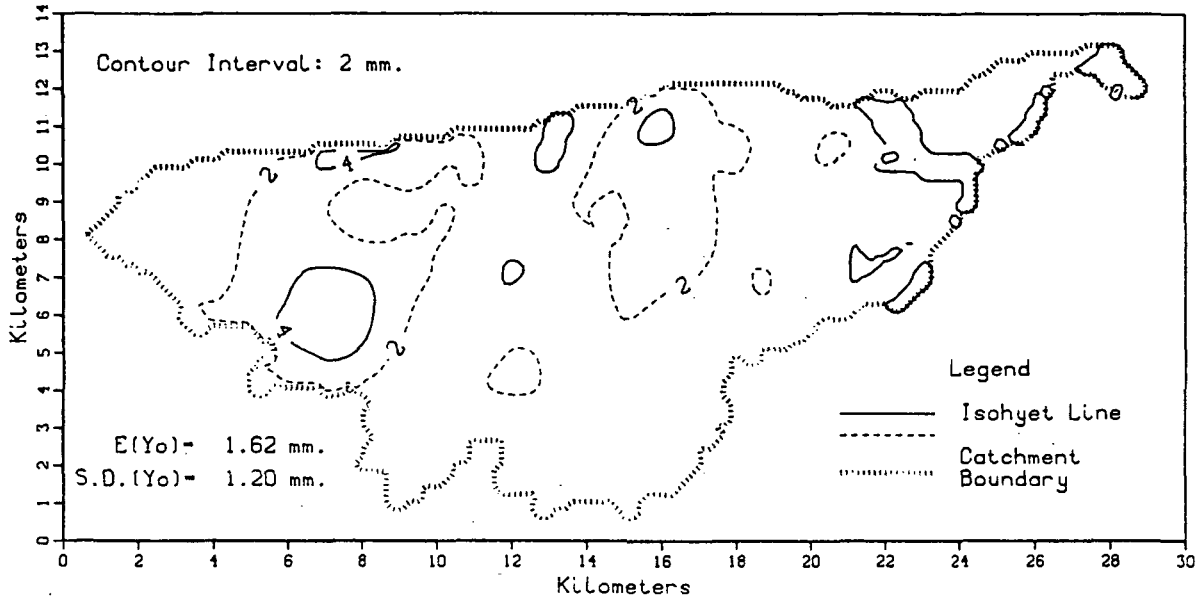
Variance of Point Depth (mm. sq.): $Var(Y) = 0.233$

Coef. of Skewness of Point Depth: $S.C.(Y) = 2.022$

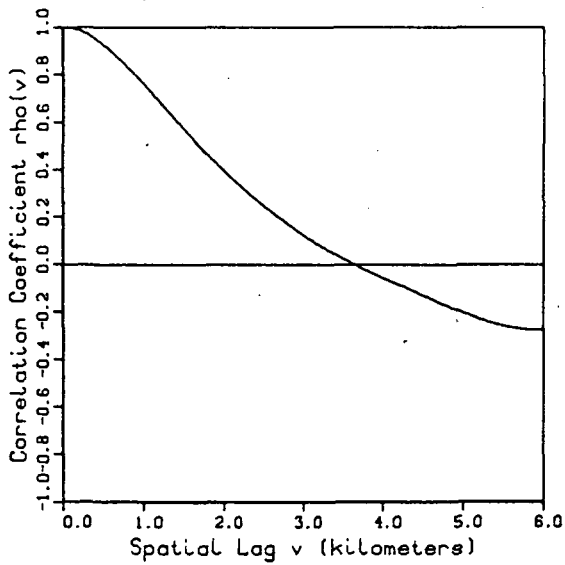
Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	0.118	0.0	1.000	0.00	1.000
2	0.013	0.2	0.993	0.04	0.932
3	0.000	0.4	0.975	0.16	0.863
		0.6	0.947	0.36	0.792
		0.8	0.911	0.64	0.726
		1.0	0.871	1.00	0.662
		1.2	0.828	1.44	0.607
		1.4	0.787	1.96	0.560
		1.6	0.749	2.56	0.514
		1.8	0.714	3.24	0.471
		2.0	0.684	4.00	0.437
		2.2	0.658	4.84	0.403
		2.4	0.635	5.76	0.374
		2.6	0.614	6.76	0.348
		2.8	0.591	7.84	0.323
		3.0	0.567	9.00	0.301
		3.2	0.543	10.24	0.280
		3.4	0.517	11.56	0.259
		3.6	0.488	12.96	0.237
		3.8	0.458	14.44	0.213
		4.0	0.426	16.00	0.185
		4.2	0.394	17.64	0.154
		4.4	0.364	19.36	0.130
		4.6	0.340	21.16	0.113
		4.8	0.319	23.04	0.099
		5.0	0.302	25.00	0.089
		5.2	0.286	27.04	0.078
		5.4	0.274	29.16	0.068
		5.6	0.262	31.36	0.057
		5.8	0.249	33.64	0.044
		6.0	0.233	36.00	0.024

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

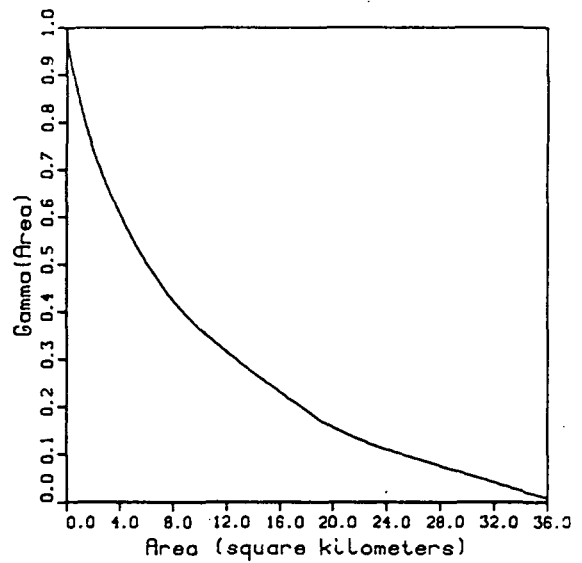
Storm Day
 Sept 22, 1974



Spatial Correlation



Variance Function



Storm Day Sept 22 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c) = 0.028$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c) = 0.972$

Expected Value of Point Depth (mm.): $E(Y) = 1.604$

Variance of Point Depth (mm. sq.): $Var(Y) = 1.228$

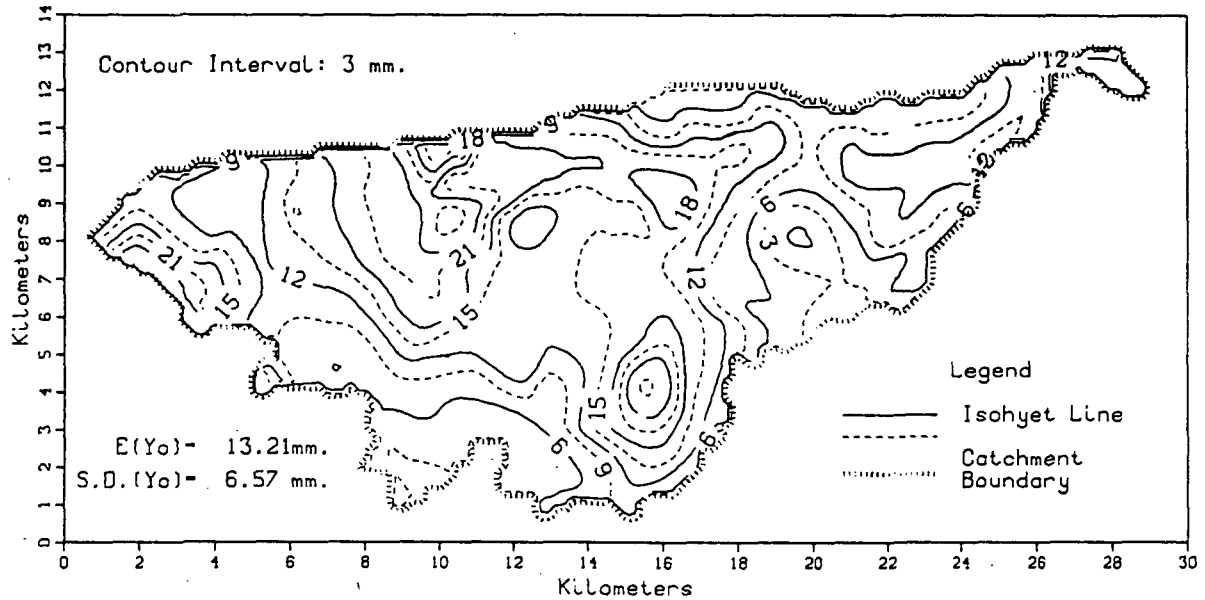
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.767$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.708	0.0	1.000	0.00	1.000
2	0.280	0.2	0.986	0.04	0.983
3	0.122	0.4	0.949	0.16	0.956
4	0.040	0.6	0.896	0.36	0.922
5	0.004	0.8	0.830	0.64	0.884
6	0.000	1.0	0.757	1.00	0.840
		1.2	0.682	1.44	0.793
		1.4	0.606	1.96	0.746
		1.6	0.531	2.56	0.699
		1.8	0.460	3.24	0.653
		2.0	0.393	4.00	0.606
		2.2	0.331	4.84	0.560
		2.4	0.273	5.76	0.514
		2.6	0.219	6.76	0.470
		2.8	0.168	7.84	0.428
		3.0	0.121	9.00	0.391
		3.2	0.079	10.24	0.357
		3.4	0.040	11.56	0.325
		3.6	0.004	12.96	0.294
		3.8	-0.029	14.44	0.263
		4.0	-0.060	16.00	0.231
		4.2	-0.089	17.64	0.198
		4.4	-0.118	19.36	0.166
		4.6	-0.148	21.16	0.141
		4.8	-0.177	23.04	0.118
		5.0	-0.205	25.00	0.101
		5.2	-0.232	27.04	0.083
		5.4	-0.254	29.16	0.064
		5.6	-0.270	31.36	0.046
		5.8	-0.278	33.64	0.026
		6.0	-0.279	36.00	0.007

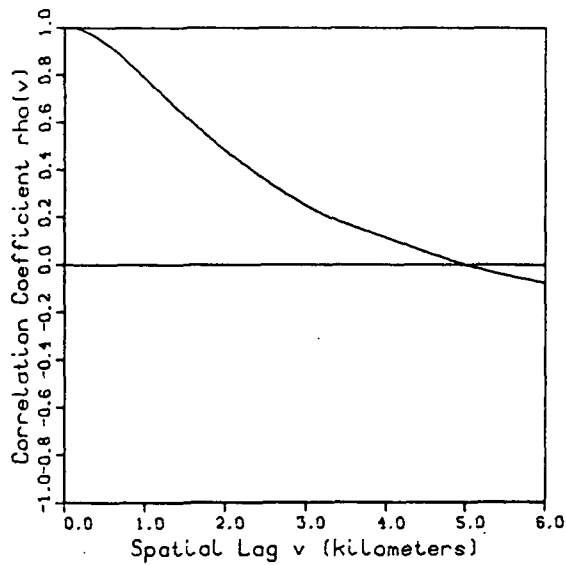
Walnut Gulch, Arizona

Ac=154.21 sq.km.

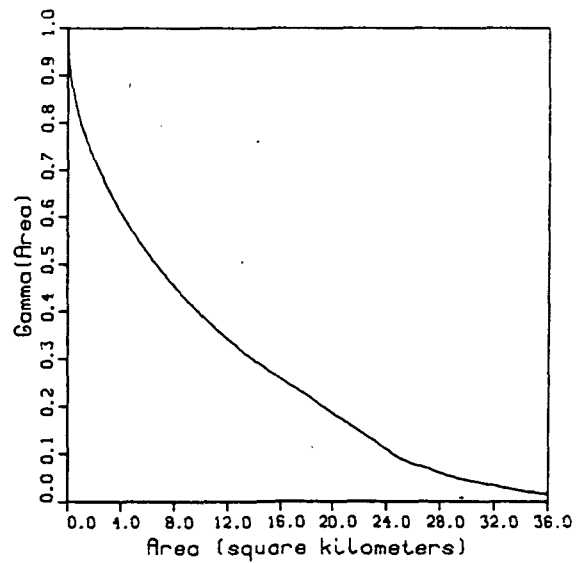
Storm Day
Sept 24, 1974



Spatial Correlation



Variance Function



Storm Day Sept 24 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.001$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.999$

Expected Value of Point Depth (mm.): $E(Y) = 12.851$

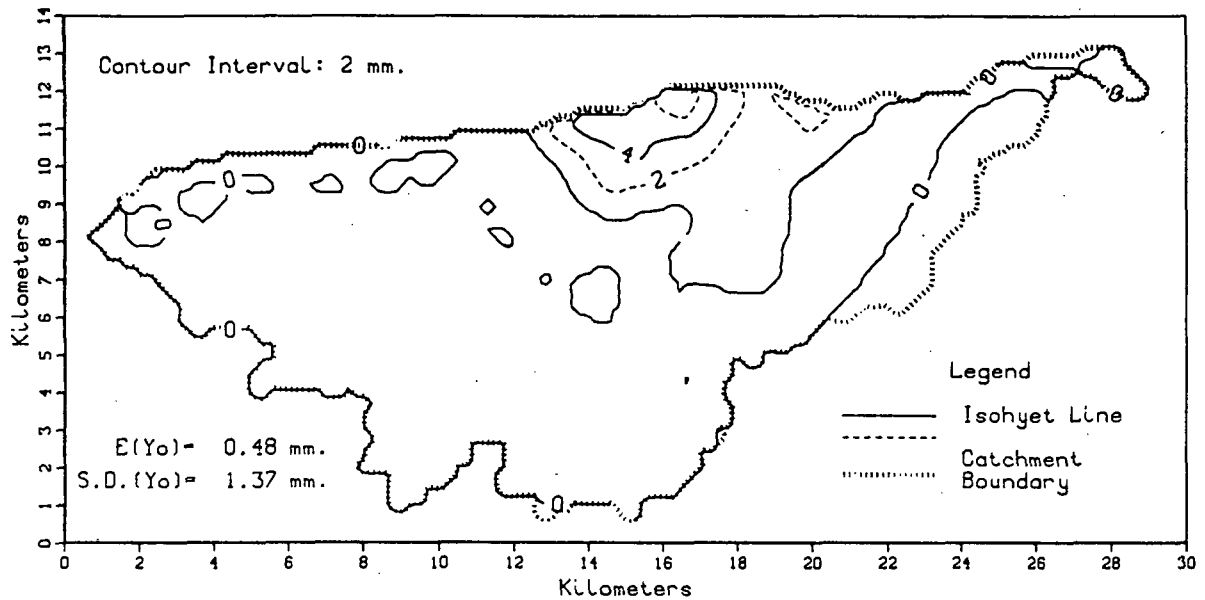
Variance of Point Depth (mm. sq.): $Var(Y) = 34.756$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.369$

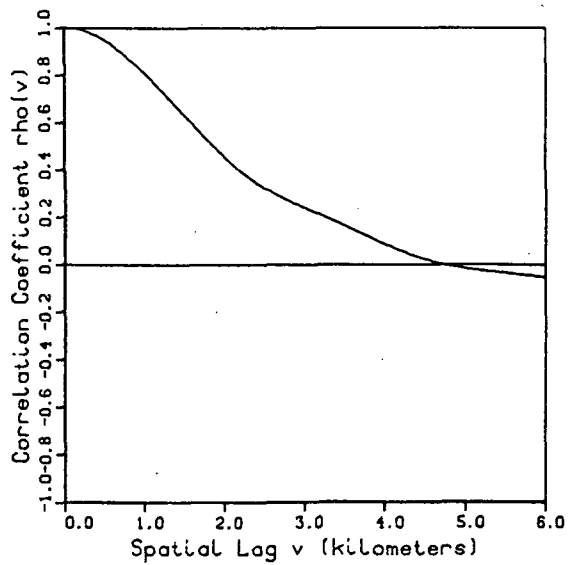
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.993	0.0	1.000	0.00	1.000
2	0.987	0.2	0.989	0.04	0.963
3	0.968	0.4	0.956	0.16	0.922
4	0.949	0.6	0.908	0.36	0.880
5	0.922	0.8	0.849	0.64	0.839
6	0.872	1.0	0.785	1.00	0.800
7	0.821	1.2	0.720	1.44	0.763
8	0.775	1.4	0.655	1.96	0.726
9	0.731	1.6	0.593	2.56	0.687
10	0.690	1.8	0.535	3.24	0.648
11	0.632	2.0	0.480	4.00	0.609
12	0.570	2.2	0.427	4.84	0.570
13	0.501	2.4	0.377	5.76	0.531
14	0.415	2.6	0.329	6.76	0.494
15	0.342	2.8	0.286	7.84	0.457
16	0.274	3.0	0.246	9.00	0.421
17	0.222	3.2	0.211	10.24	0.386
18	0.182	3.4	0.182	11.56	0.352
19	0.148	3.6	0.157	12.96	0.319
20	0.118	3.8	0.134	14.44	0.288
21	0.092	4.0	0.110	16.00	0.257
22	0.072	4.2	0.086	17.64	0.228
23	0.053	4.4	0.062	19.36	0.197
24	0.039	4.6	0.039	21.16	0.163
25	0.029	4.8	0.017	23.04	0.128
26	0.020	5.0	-.004	25.00	0.090
27	0.012	5.2	-.023	27.04	0.069
28	0.007	5.4	-.040	29.16	0.049
29	0.005	5.6	-.054	31.36	0.037
30	0.004	5.8	-.067	33.64	0.024
31	0.004	6.0	-.079	36.00	0.016
32	0.003				
33	0.002				
34	0.001				
35	0.000				
36	0.000				

Walnut Gulch, Arizona
Ac=154.21 sq.km.

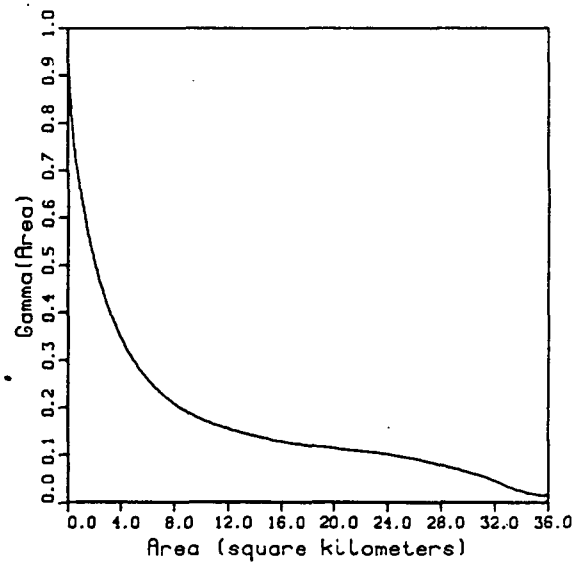
Storm Day
Sept 25, 1974



Spatial Correlation



Variance Function



Storm Day Sept 25 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.695$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.305$

Expected Value of Point Depth (mm.): $E(Y) = 0.314$

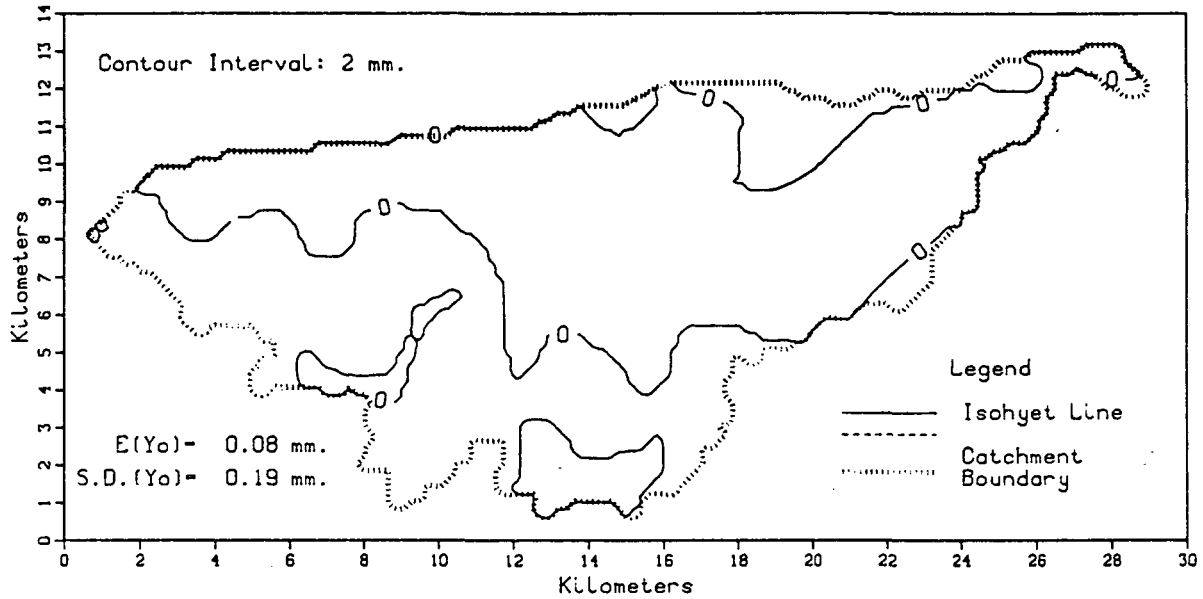
Variance of Point Depth (mm. sq.): $Var(Y) = 0.927$

Coef. of Skewness of Point Depth: $S.C.(Y) = 4.065$

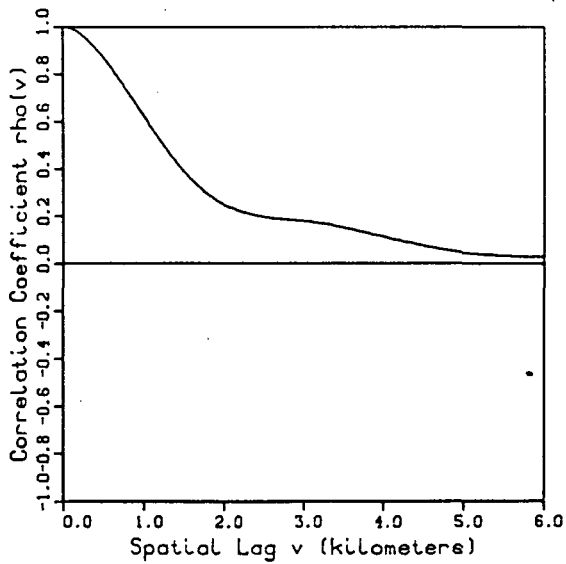
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.086	0.0	1.000	0.00	1.000
2	0.056	0.2	0.991	0.04	0.938
3	0.038	0.4	0.965	0.16	0.868
4	0.024	0.6	0.923	0.36	0.793
5	0.007	0.8	0.869	0.64	0.717
6	0.004	1.0	0.805	1.00	0.645
7	0.001	1.2	0.736	1.44	0.577
8	0.000	1.4	0.665	1.96	0.513
		1.6	0.592	2.56	0.452
		1.8	0.522	3.24	0.395
		2.0	0.455	4.00	0.345
		2.2	0.394	4.84	0.302
		2.4	0.343	5.76	0.265
		2.6	0.301	6.76	0.235
		2.8	0.266	7.84	0.210
		3.0	0.235	9.00	0.188
		3.2	0.206	10.24	0.170
		3.4	0.176	11.56	0.157
		3.6	0.145	12.96	0.146
		3.8	0.113	14.44	0.135
		4.0	0.082	16.00	0.126
		4.2	0.053	17.64	0.120
		4.4	0.028	19.36	0.115
		4.6	0.008	21.16	0.109
		4.8	-.008	23.04	0.104
		5.0	-.020	25.00	0.096
		5.2	-.029	27.04	0.084
		5.4	-.036	29.16	0.069
		5.6	-.042	31.36	0.052
		5.8	-.050	33.64	0.026
		6.0	-.057	36.00	0.015

Walnut Gulch, Arizona
 $A_c = 154.21$ sq.km.

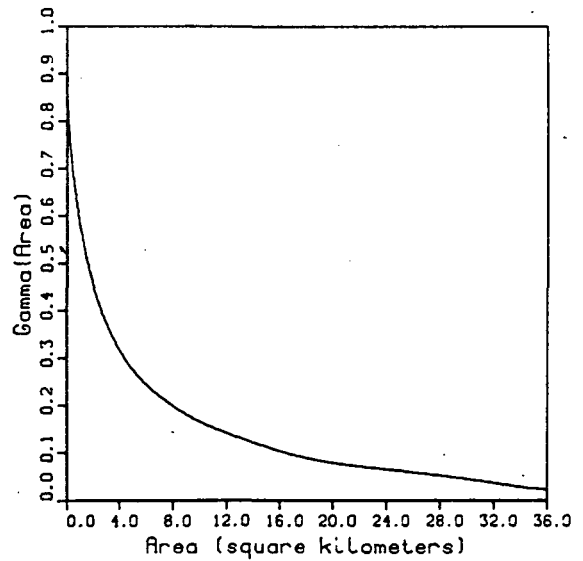
Storm Day
 Sept 26, 1974



Spatial Correlation



Variance Function



Storm Day Sept 26 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.547$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.453$

Expected Value of Point Depth (mm.): $E(Y) = 0.088$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.023$

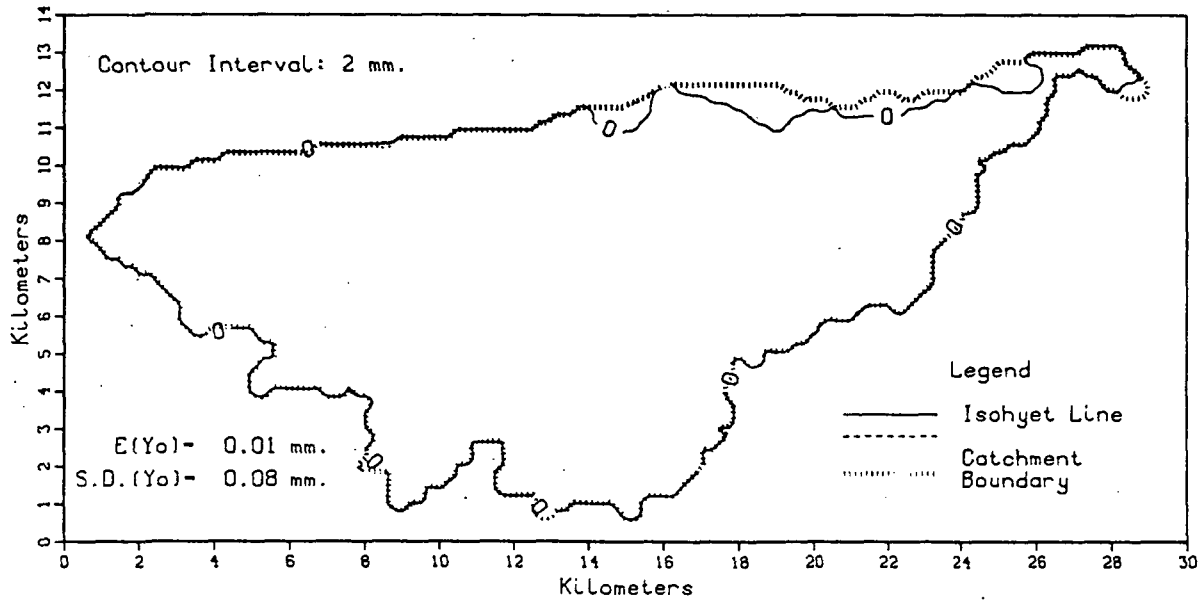
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.155$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.974	0.04	0.896
		0.4	0.910	0.16	0.804
		0.6	0.823	0.36	0.729
		0.8	0.723	0.64	0.654
		1.0	0.620	1.00	0.584
		1.2	0.519	1.44	0.518
		1.4	0.427	1.96	0.459
		1.6	0.350	2.56	0.405
		1.8	0.290	3.24	0.357
		2.0	0.246	4.00	0.316
		2.2	0.219	4.84	0.281
		2.4	0.201	5.76	0.250
		2.6	0.190	6.76	0.224
		2.8	0.183	7.84	0.201
		3.0	0.177	9.00	0.180
		3.2	0.169	10.24	0.162
		3.4	0.157	11.56	0.146
		3.6	0.143	12.96	0.131
		3.8	0.127	14.44	0.117
		4.0	0.112	16.00	0.103
		4.2	0.095	17.64	0.091
		4.4	0.081	19.36	0.081
		4.6	0.067	21.16	0.074
		4.8	0.055	23.04	0.067
		5.0	0.045	25.00	0.061
		5.2	0.038	27.04	0.055
		5.4	0.034	29.16	0.047
		5.6	0.030	31.36	0.039
		5.8	0.028	33.64	0.029
		6.0	0.029	36.00	0.022

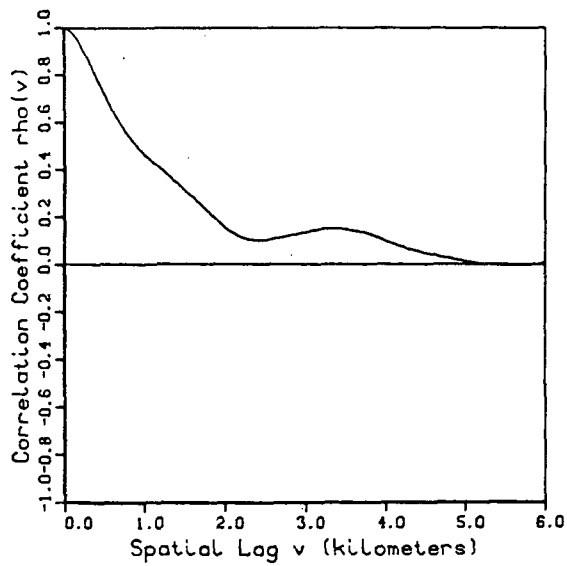
Walnut Gulch, Arizona

Ac=154.21 sq.km.

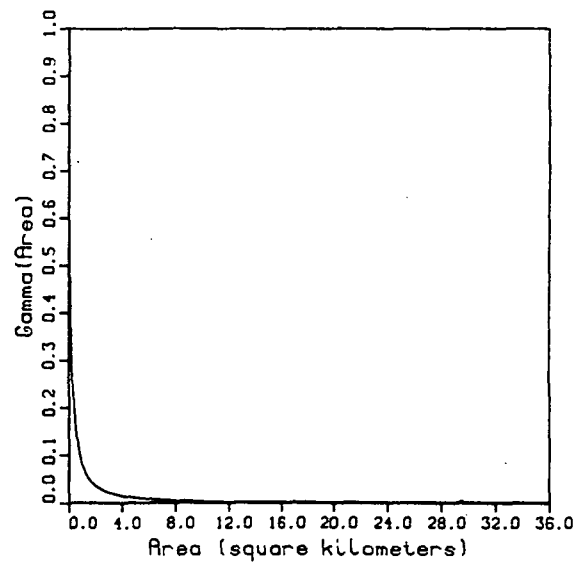
Storm Day
Sept 27, 1974



Spatial Correlation



Variance Function



Storm Day Sept 27 1974

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.963$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.037$

Expected Value of Point Depth (mm.): $E(Y) = 0.004$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.001$

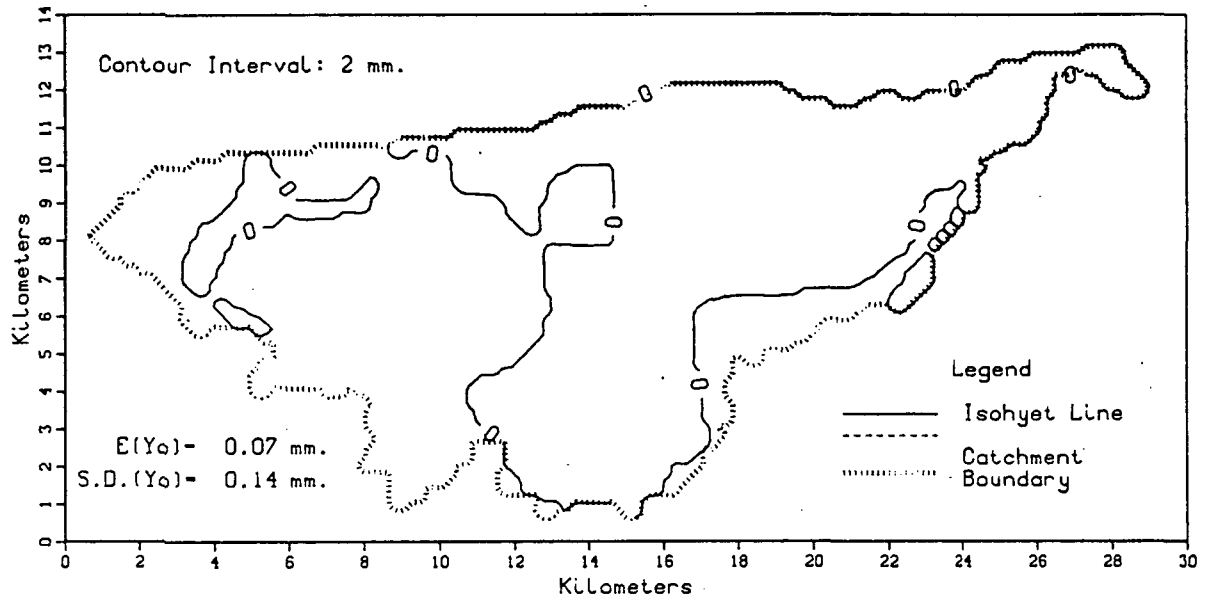
Coef. of Skewness of Point Depth: $S.C.(Y) = 12.282$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.930	0.04	0.619
		0.4	0.791	0.16	0.378
		0.6	0.650	0.36	0.225
		0.8	0.542	0.64	0.134
		1.0	0.463	1.00	0.083
		1.2	0.401	1.44	0.054
		1.4	0.341	1.96	0.037
		1.6	0.281	2.56	0.026
		1.8	0.220	3.24	0.019
		2.0	0.154	4.00	0.014
		2.2	0.114	4.84	0.010
		2.4	0.100	5.76	0.008
		2.6	0.110	6.76	0.006
		2.8	0.123	7.84	0.004
		3.0	0.138	9.00	0.003
		3.2	0.150	10.24	0.002
		3.4	0.151	11.56	0.001
		3.6	0.141	12.96	0.001
		3.8	0.126	14.44	0.001
		4.0	0.097	16.00	0.000
		4.2	0.073	17.64	0.000
		4.4	0.053	19.36	0.000
		4.6	0.037	21.16	0.000
		4.8	0.024	23.04	0.000
		5.0	0.011	25.00	0.000
		5.2	0.000	27.04	0.000
		5.4	-.002	29.16	0.000
		5.6	-.003	31.36	0.000
		5.8	0.000	33.64	0.000
		6.0	0.006	36.00	0.000

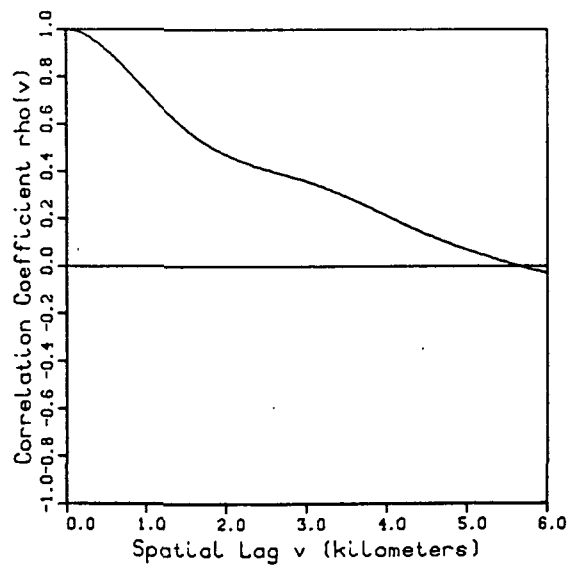
Walnut Gulch, Arizona

Ac=154.21 sq.km.

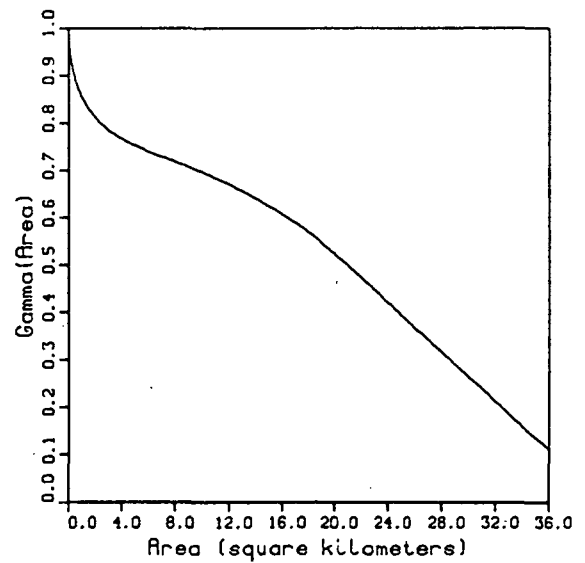
Storm Day
June 6, 1975



Spatial Correlation



Variance Function



Storm Day June 6 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.535$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.465$

Expected Value of Point Depth (mm.): $E(Y) = 0.090$

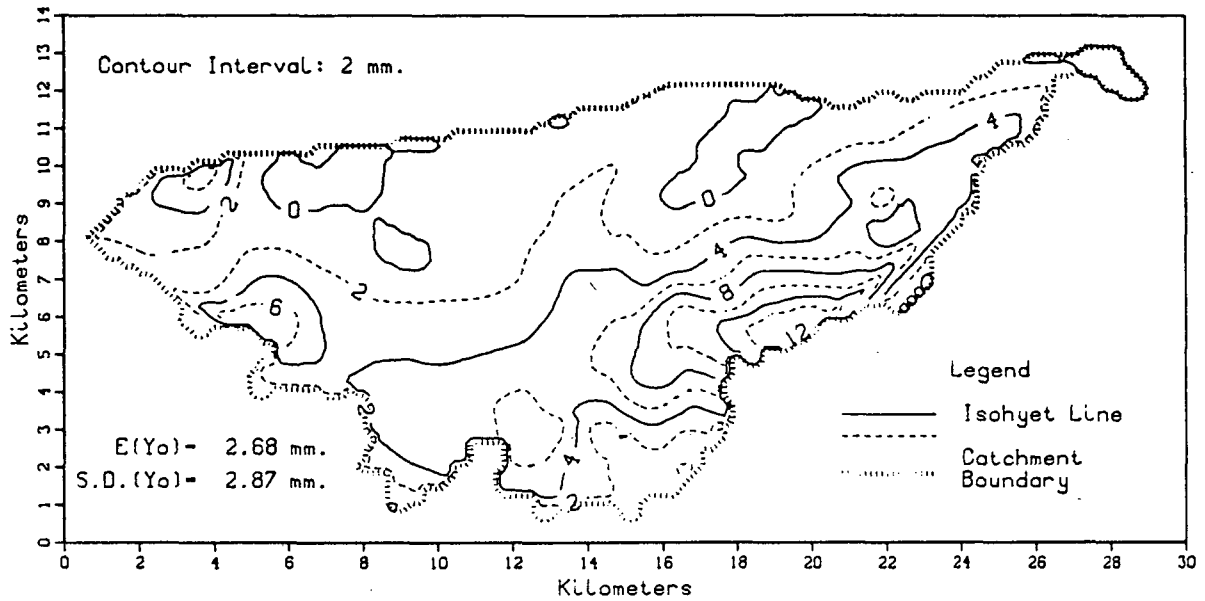
Variance of Point Depth (mm. sq.): $Var(Y) = 0.017$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.137$

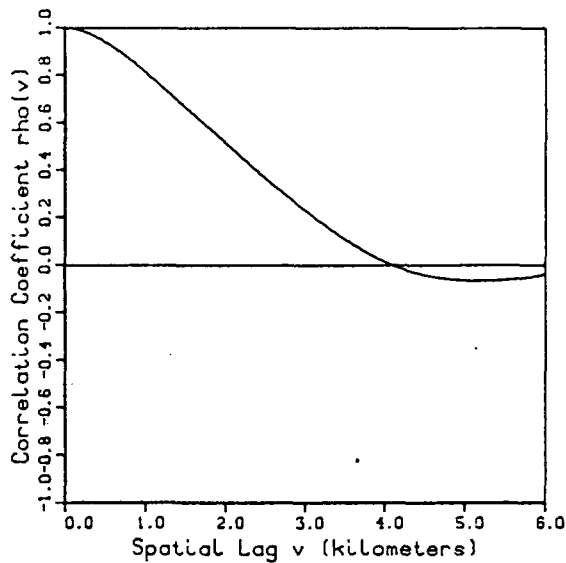
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v_i (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.984	0.04	0.971
		0.4	0.941	0.16	0.940
		0.6	0.881	0.36	0.909
		0.8	0.812	0.64	0.881
		1.0	0.738	1.00	0.855
		1.2	0.667	1.44	0.833
		1.4	0.602	1.96	0.813
		1.6	0.547	2.56	0.795
		1.8	0.503	3.24	0.779
		2.0	0.467	4.00	0.765
		2.2	0.438	4.84	0.753
		2.4	0.415	5.76	0.741
		2.6	0.394	6.76	0.729
		2.8	0.375	7.84	0.718
		3.0	0.355	9.00	0.705
		3.2	0.332	10.24	0.691
		3.4	0.305	11.56	0.674
		3.6	0.274	12.96	0.655
		3.8	0.242	14.44	0.632
		4.0	0.209	16.00	0.605
		4.2	0.176	17.64	0.575
		4.4	0.144	19.36	0.537
		4.6	0.116	21.16	0.493
		4.8	0.090	23.04	0.444
		5.0	0.066	25.00	0.392
		5.2	0.043	27.04	0.339
		5.4	0.022	29.16	0.284
		5.6	0.001	31.36	0.229
		5.8	-0.017	33.64	0.168
		6.0	-0.032	36.00	0.112

Walnut Gulch, Arizona
Ac=154.21 sq.km.

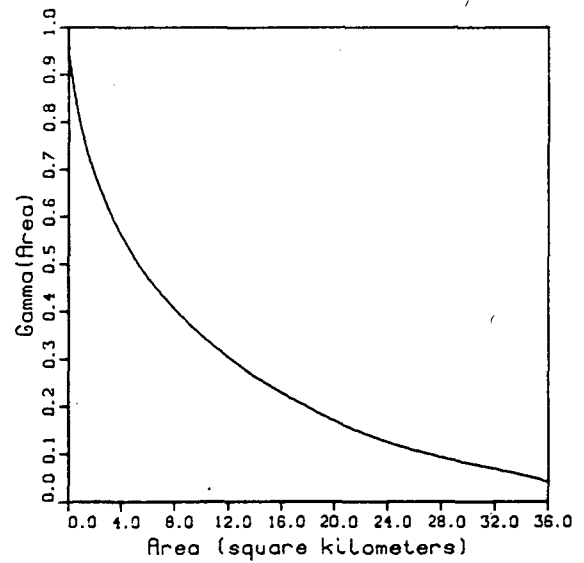
Storm Day
July 1, 1975



Spatial Correlation



Variance Function



Storm Day July 1 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.061$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.939$

Expected Value of Point Depth (mm.): $E(Y) = 3.306$

Variance of Point Depth (mm. sq.): $Var(Y) = 8.822$

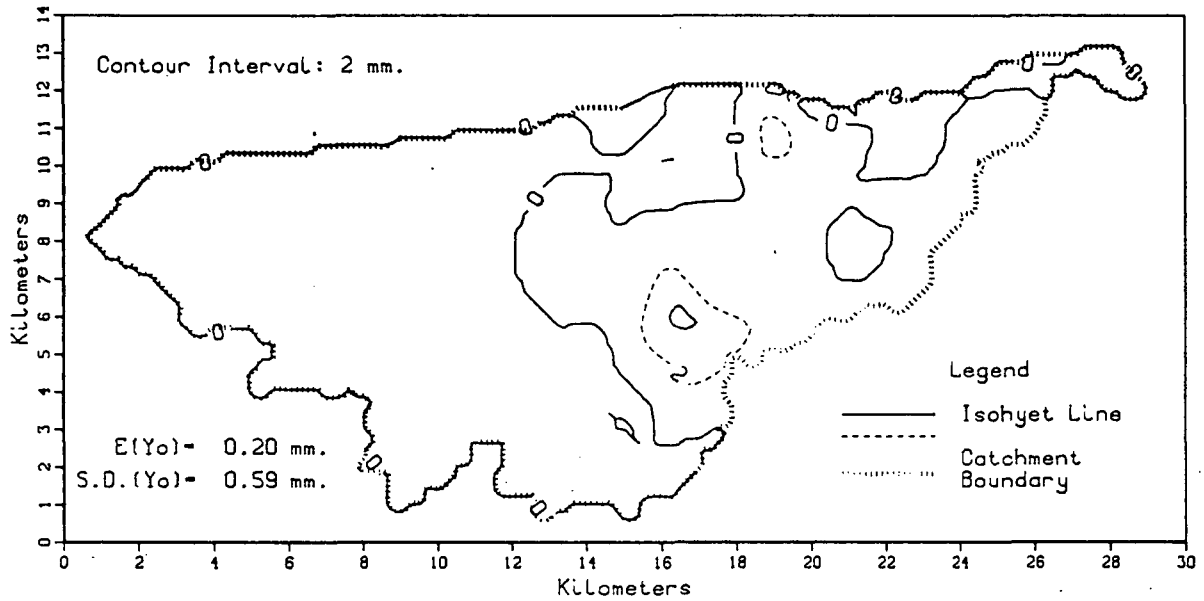
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.331$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.736	0.0	1.000	0.00	1.000
2	0.599	0.2	0.988	0.04	0.966
3	0.487	0.4	0.959	0.16	0.922
4	0.355	0.6	0.918	0.36	0.877
5	0.226	0.8	0.868	0.64	0.829
6	0.136	1.0	0.810	1.00	0.782
7	0.097	1.2	0.750	1.44	0.736
8	0.070	1.4	0.690	1.96	0.690
9	0.053	1.6	0.631	2.56	0.645
10	0.039	1.8	0.572	3.24	0.601
11	0.027	2.0	0.512	4.00	0.558
12	0.019	2.2	0.453	4.84	0.518
13	0.014	2.4	0.394	5.76	0.480
14	0.009	2.6	0.336	6.76	0.443
15	0.004	2.8	0.281	7.84	0.409
16	0.000	3.0	0.228	9.00	0.375
		3.2	0.178	10.24	0.343
		3.4	0.129	11.56	0.313
		3.6	0.085	12.96	0.283
		3.8	0.045	14.44	0.255
		4.0	0.011	16.00	0.228
		4.2	-0.016	17.64	0.203
		4.4	-0.037	19.36	0.178
		4.6	-0.053	21.16	0.154
		4.8	-0.063	23.04	0.133
		5.0	-0.068	25.00	0.114
		5.2	-0.069	27.04	0.099
		5.4	-0.066	29.16	0.085
		5.6	-0.061	31.36	0.071
		5.8	-0.052	33.64	0.058
		6.0	-0.040	36.00	0.040

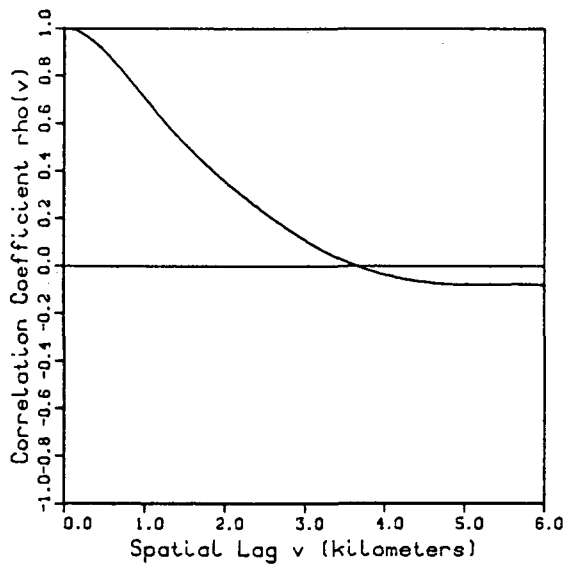
Walnut Gulch, Arizona

Ac=154.21 sq.km.

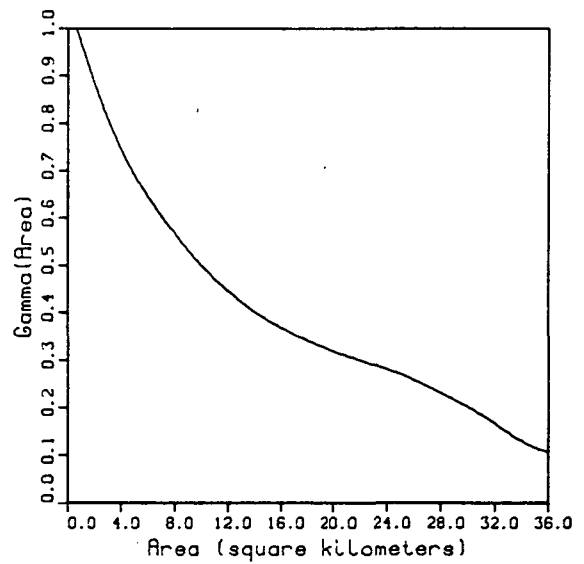
Storm Day
July 2, 1975



Spatial Correlation



Variance Function



Storm Day July 2 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.611$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.389$

Expected Value of Point Depth (mm.): $E(Y) = 0.287$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.419$

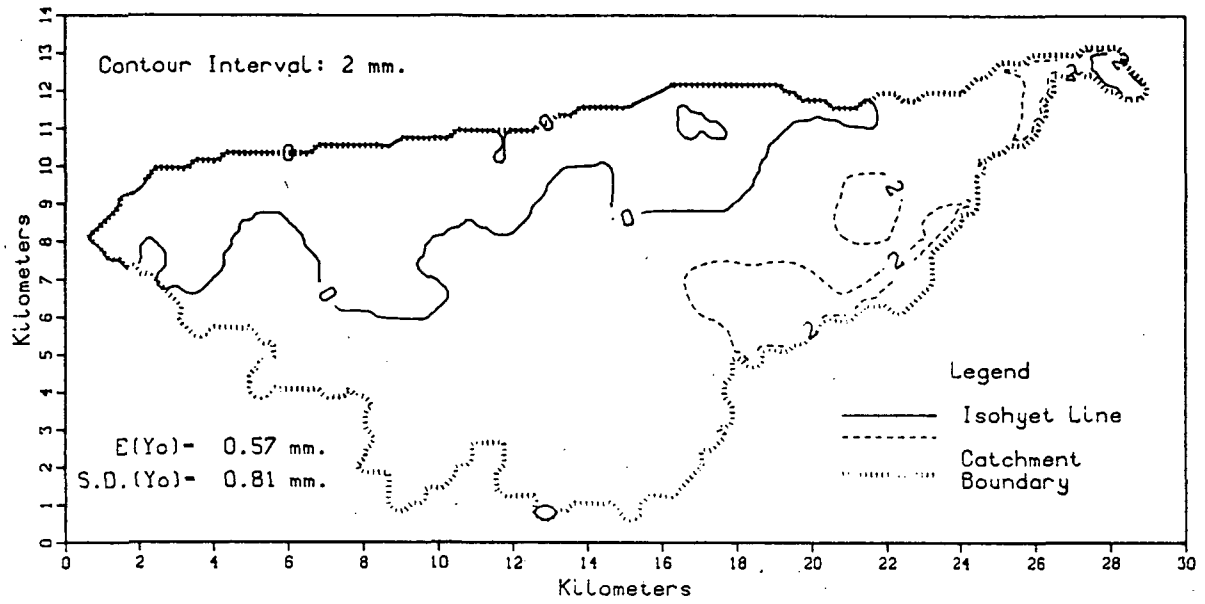
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.221$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.095	0.0	1.000	0.00	1.000
2	0.037	0.2	0.982	0.04	1.021
3	0.016	0.4	0.935	0.16	1.029
4	0.002	0.6	0.867	0.36	1.023
5	0.000	0.8	0.788	0.64	1.001
		1.0	0.705	1.00	0.969
		1.2	0.624	1.44	0.931
		1.4	0.548	1.96	0.888
		1.6	0.479	2.56	0.840
		1.8	0.414	3.24	0.791
		2.0	0.355	4.00	0.743
		2.2	0.298	4.84	0.698
		2.4	0.246	5.76	0.654
		2.6	0.197	6.76	0.612
		2.8	0.151	7.84	0.571
		3.0	0.107	9.00	0.531
		3.2	0.067	10.24	0.492
		3.4	0.033	11.56	0.456
		3.6	0.003	12.96	0.423
		3.8	-.021	14.44	0.393
		4.0	-.040	16.00	0.367
		4.2	-.056	17.64	0.344
		4.4	-.067	19.36	0.324
		4.6	-.075	21.16	0.306
		4.8	-.080	23.04	0.288
		5.0	-.082	25.00	0.268
		5.2	-.082	27.04	0.243
		5.4	-.080	29.16	0.213
		5.6	-.079	31.36	0.178
		5.8	-.080	33.64	0.135
		6.0	-.086	36.00	0.105

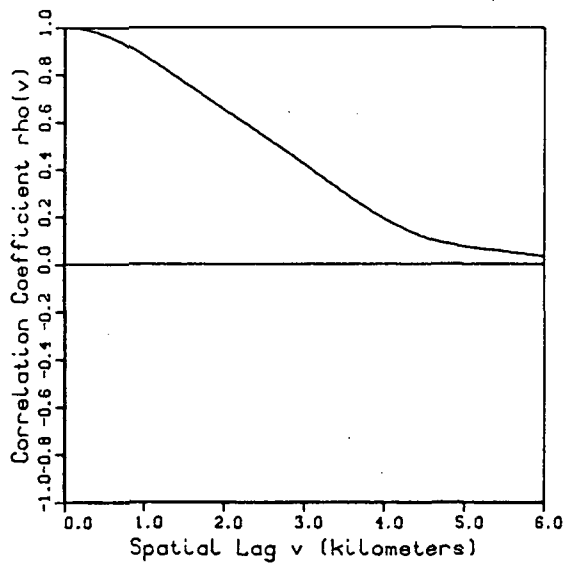
Walnut Gulch, Arizona

Ac=154.21 sq.km.

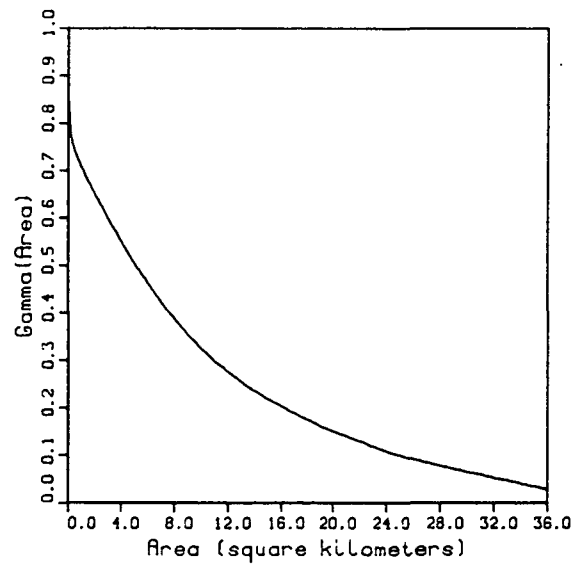
Storm Day
July 3, 1975



Spatial Correlation



Variance Function



Storm Day July 3 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.270$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.730$

Expected Value of Point Depth (mm.): $E(Y) = 0.683$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.702$

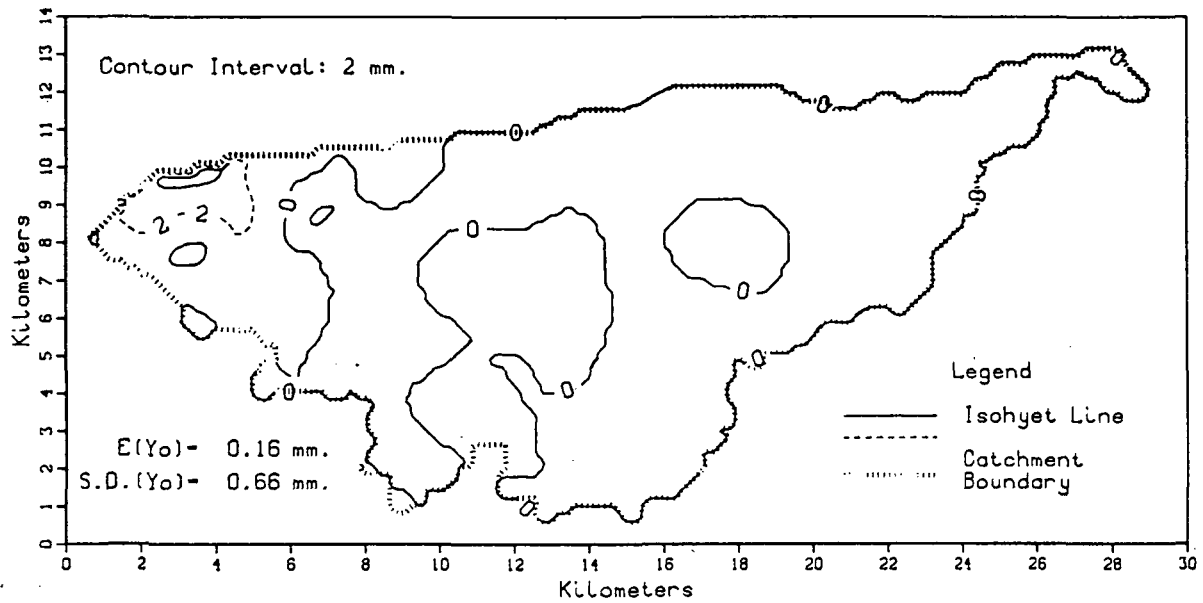
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.673$

Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c(Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	0.268	0.0	1.000	0.00	1.000
2	0.086	0.2	0.994	0.04	0.901
3	0.011	0.4	0.978	0.16	0.808
4	0.005	0.6	0.953	0.36	0.759
5	0.002	0.8	0.919	0.64	0.735
6	0.000	1.0	0.878	1.00	0.710
7	0.000	1.2	0.835	1.44	0.682
		1.4	0.790	1.96	0.653
		1.6	0.743	2.56	0.622
		1.8	0.697	3.24	0.587
		2.0	0.652	4.00	0.550
		2.2	0.607	4.84	0.512
		2.4	0.562	5.76	0.472
		2.6	0.516	6.76	0.431
		2.8	0.469	7.84	0.391
		3.0	0.421	9.00	0.353
		3.2	0.373	10.24	0.317
		3.4	0.324	11.56	0.284
		3.6	0.276	12.96	0.254
		3.8	0.231	14.44	0.227
		4.0	0.191	16.00	0.202
		4.2	0.155	17.64	0.178
		4.4	0.125	19.36	0.157
		4.6	0.101	21.16	0.137
		4.8	0.085	23.04	0.117
		5.0	0.072	25.00	0.098
		5.2	0.064	27.04	0.084
		5.4	0.057	29.16	0.069
		5.6	0.049	31.36	0.056
		5.8	0.041	33.64	0.042
		6.0	0.032	36.00	0.027

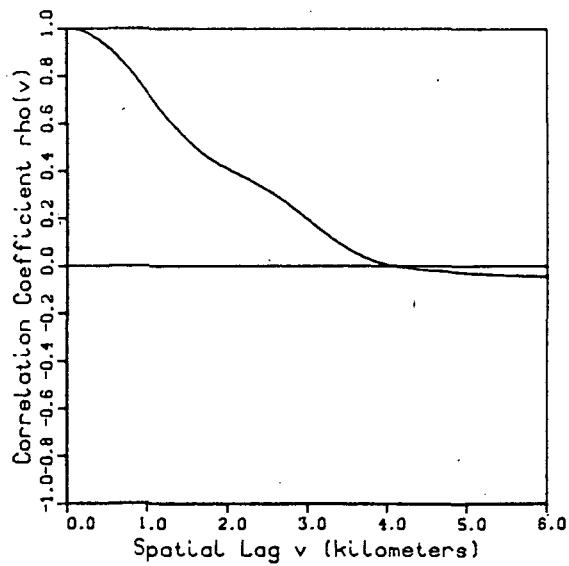
Walnut Gulch, Arizona

Ac=154.21 sq.km.

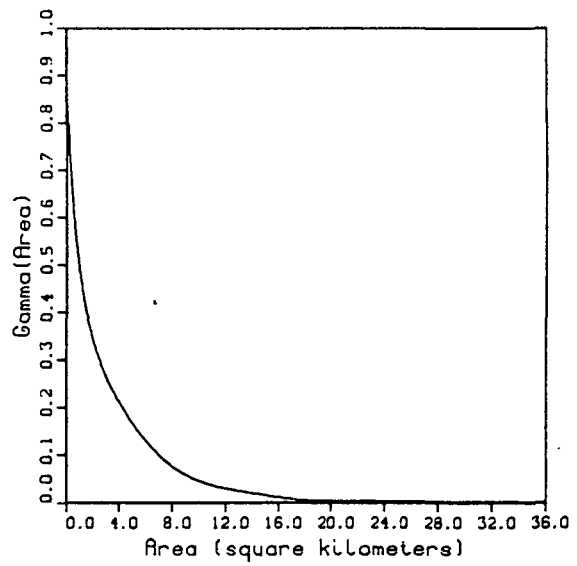
Storm Day
July 4, 1975



Spatial Correlation



Variance Function



Storm Day July 4 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.629$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.371$

Expected Value of Point Depth (mm.): $E(Y) = 0.168$

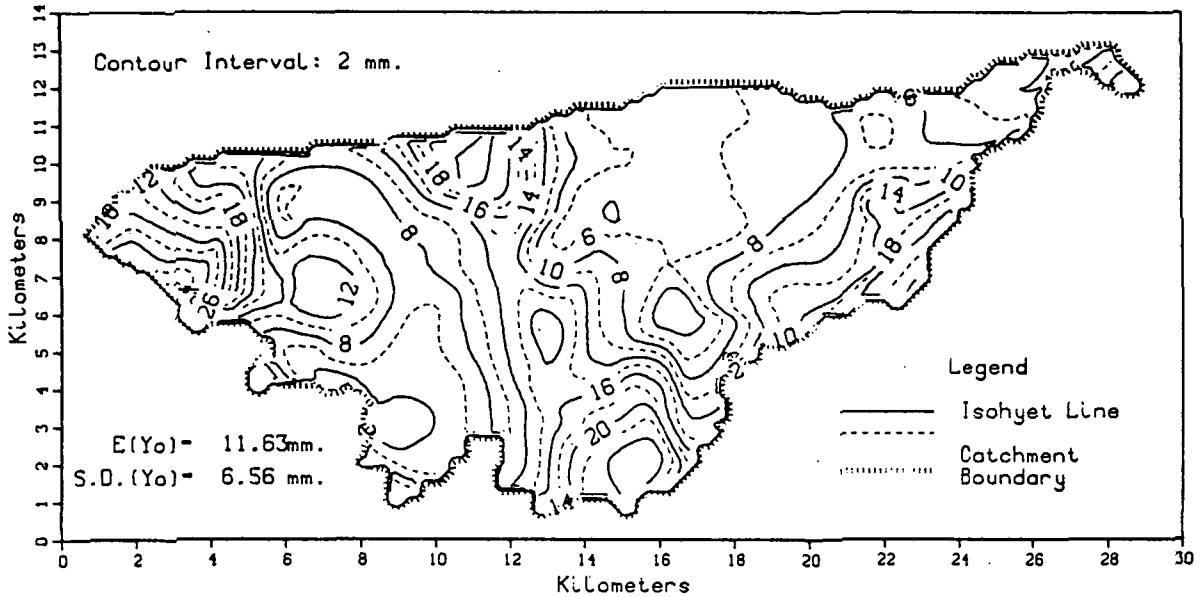
Variance of Point Depth (mm. sq.): $Var(Y) = 0.308$

Coef. of Skewness of Point Depth: $S.C.(Y) = 4.984$

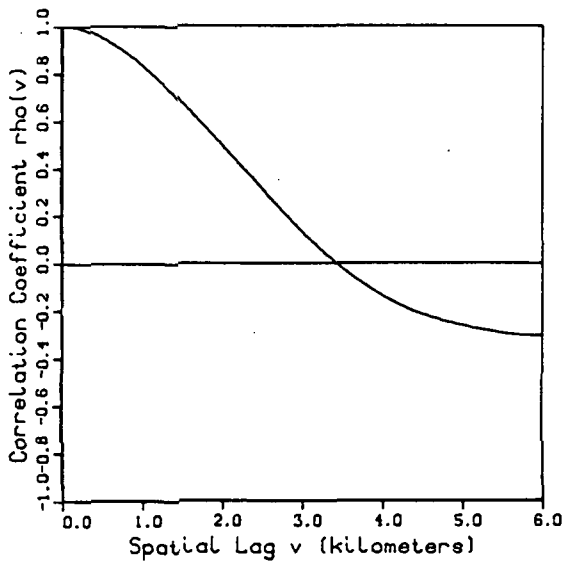
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.046	0.0	1.000	0.00	1.000
2	0.026	0.2	0.987	0.04	0.905
3	0.013	0.4	0.950	0.16	0.801
4	0.004	0.6	0.892	0.36	0.693
5	0.000	0.8	0.815	0.64	0.588
		1.0	0.729	1.00	0.493
		1.2	0.641	1.44	0.414
		1.4	0.561	1.96	0.351
		1.6	0.495	2.56	0.297
		1.8	0.445	3.24	0.251
		2.0	0.405	4.00	0.212
		2.2	0.371	4.84	0.173
		2.4	0.335	5.76	0.137
		2.6	0.294	6.76	0.107
		2.8	0.245	7.84	0.078
		3.0	0.193	9.00	0.058
		3.2	0.141	10.24	0.042
		3.4	0.093	11.56	0.032
		3.6	0.052	12.96	0.024
		3.8	0.021	14.44	0.017
		4.0	0.002	16.00	0.010
		4.2	-0.009	17.64	0.005
		4.4	-0.018	19.36	0.003
		4.6	-0.023	21.16	0.003
		4.8	-0.028	23.04	0.002
		5.0	-0.033	25.00	0.002
		5.2	-0.037	27.04	0.001
		5.4	-0.041	29.16	0.001
		5.6	-0.044	31.36	0.001
		5.8	-0.046	33.64	0.000
		6.0	-0.047	36.00	0.000

Walnut Gulch, Arizona
Ac=154.21 sq.km.

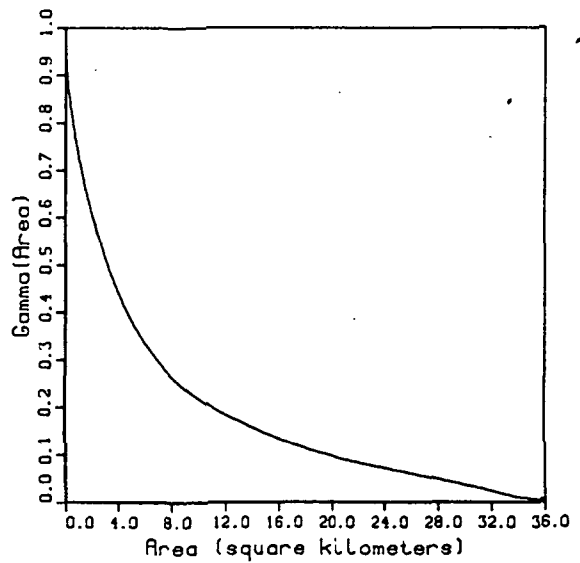
Storm Day
July 5, 1975



Spatial Correlation



Variance Function



Storm Day July 5 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 11.213$

Variance of Point Depth (mm. sq.): $Var(Y) = 35.217$

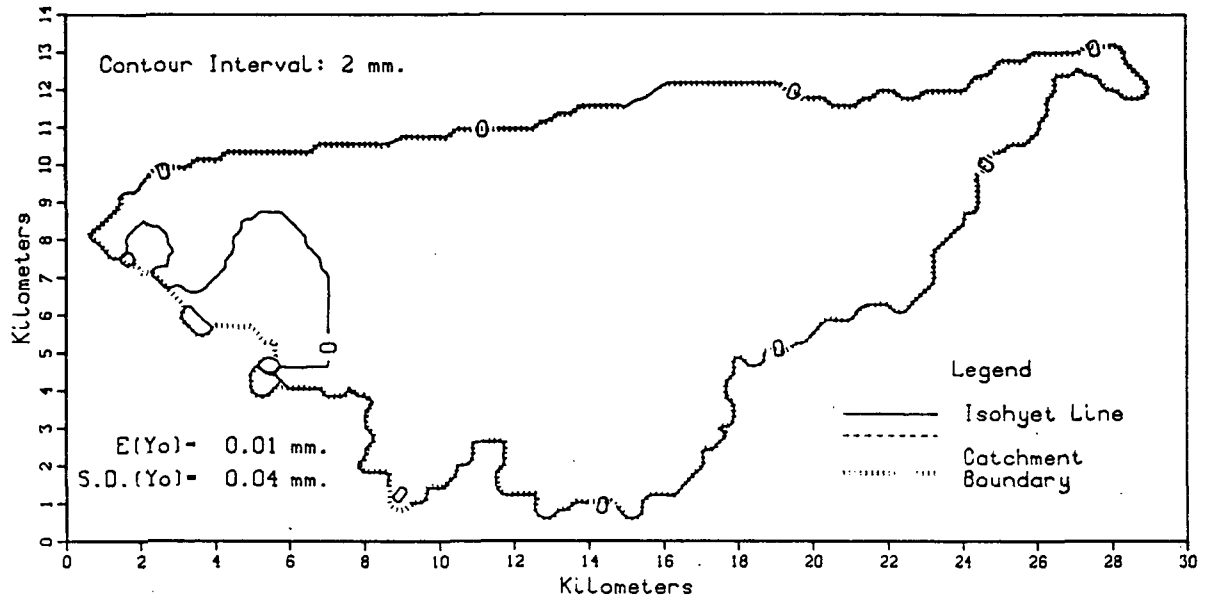
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.972$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.991	0.04	0.952
3	0.997	0.4	0.967	0.16	0.900
4	0.975	0.6	0.930	0.36	0.847
5	0.920	0.8	0.885	0.64	0.791
6	0.802	1.0	0.832	1.00	0.731
7	0.688	1.2	0.772	1.44	0.671
8	0.604	1.4	0.707	1.96	0.612
9	0.535	1.6	0.637	2.56	0.552
10	0.470	1.8	0.565	3.24	0.493
11	0.417	2.0	0.494	4.00	0.440
12	0.365	2.2	0.421	4.84	0.389
13	0.312	2.4	0.347	5.76	0.343
14	0.269	2.6	0.273	6.76	0.303
15	0.232	2.8	0.201	7.84	0.267
16	0.196	3.0	0.131	9.00	0.238
17	0.168	3.2	0.064	10.24	0.212
18	0.148	3.4	0.003	11.56	0.190
19	0.128	3.6	-0.051	12.96	0.170
20	0.106	3.8	-0.100	14.44	0.150
21	0.083	4.0	-0.142	16.00	0.132
22	0.065	4.2	-0.178	17.64	0.116
23	0.053	4.4	-0.209	19.36	0.101
24	0.038	4.6	-0.232	21.16	0.088
25	0.026	4.8	-0.252	23.04	0.076
26	0.018	5.0	-0.268	25.00	0.065
27	0.013	5.2	-0.283	27.04	0.053
28	0.009	5.4	-0.295	29.16	0.040
29	0.006	5.6	-0.304	31.36	0.027
30	0.003	5.8	-0.309	33.64	0.011
31	0.000	6.0	-0.310	36.00	0.004
32	0.000				

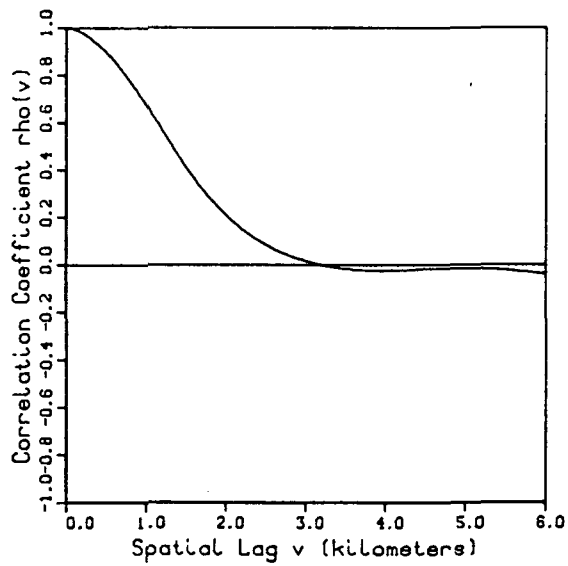
Walnut Gulch, Arizona

Ac=154.21 sq.km.

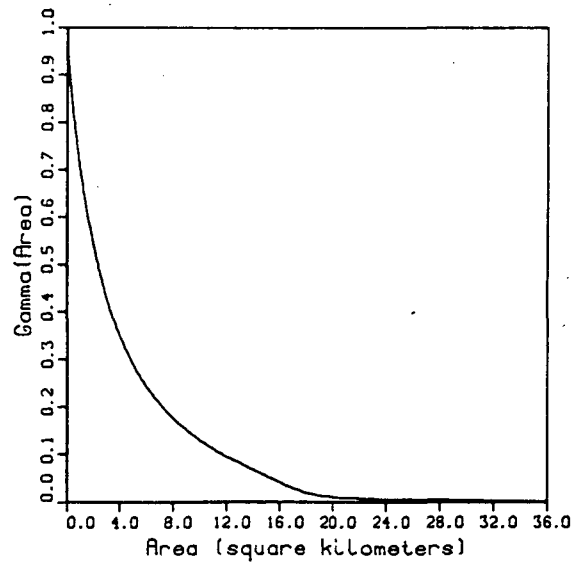
Storm Day
July 6, 1975



Spatial Correlation



Variance Function



Storm Day July 6 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.921$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.079$

Expected Value of Point Depth (mm.): $E(Y) = 0.008$

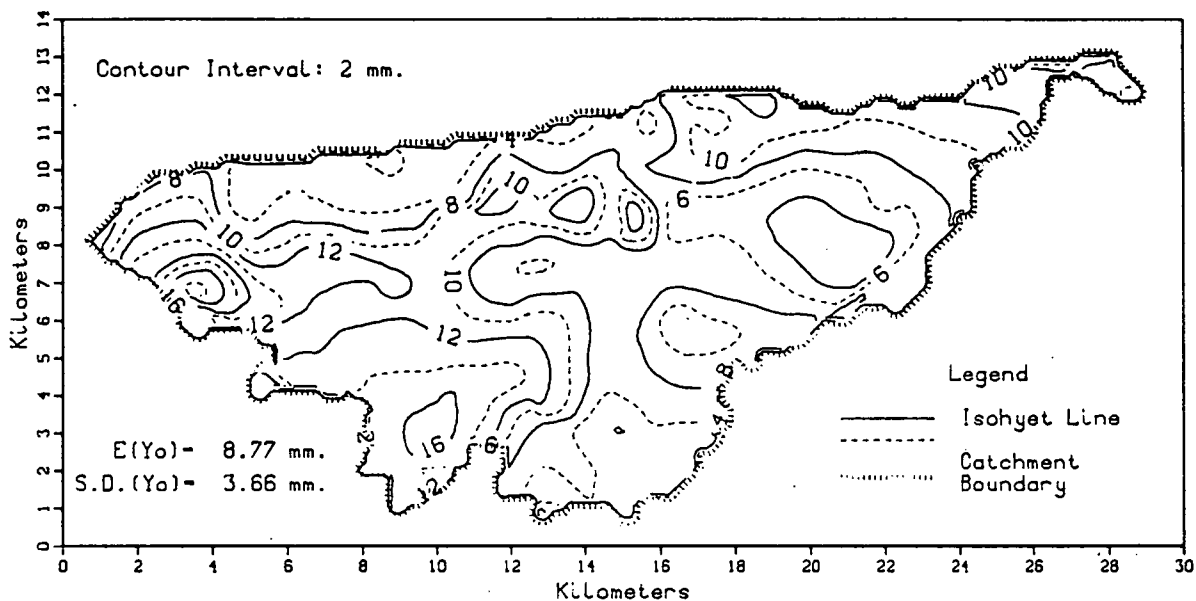
Variance of Point Depth (mm. sq.): $Var(Y) = 0.002$

Coef. of Skewness of Point Depth: $S.C.(Y) = 5.637$

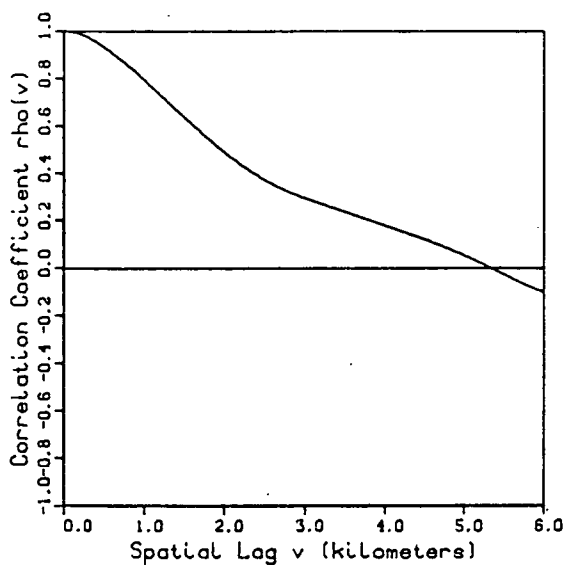
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.976	0.04	0.968
		0.4	0.927	0.16	0.919
		0.6	0.858	0.36	0.854
		0.8	0.770	0.64	0.780
		1.0	0.670	1.00	0.703
		1.2	0.562	1.44	0.624
		1.4	0.456	1.96	0.546
		1.6	0.359	2.56	0.473
		1.8	0.277	3.24	0.406
		2.0	0.207	4.00	0.347
		2.2	0.149	4.84	0.296
		2.4	0.102	5.76	0.252
		2.6	0.064	6.76	0.213
		2.8	0.035	7.84	0.180
		3.0	0.013	9.00	0.150
		3.2	-.004	10.24	0.124
		3.4	-.015	11.56	0.101
		3.6	-.023	12.96	0.081
		3.8	-.026	14.44	0.061
		4.0	-.027	16.00	0.040
		4.2	-.024	17.64	0.021
		4.4	-.019	19.36	0.011
		4.6	-.017	21.16	0.008
		4.8	-.016	23.04	0.005
		5.0	-.017	25.00	0.005
		5.2	-.020	27.04	0.004
		5.4	-.024	29.16	0.003
		5.6	-.029	31.36	0.002
		5.8	-.036	33.64	0.001
		6.0	-.043	36.00	0.000

Walnut Gulch, Arizona
Ac=154.21 sq.km.

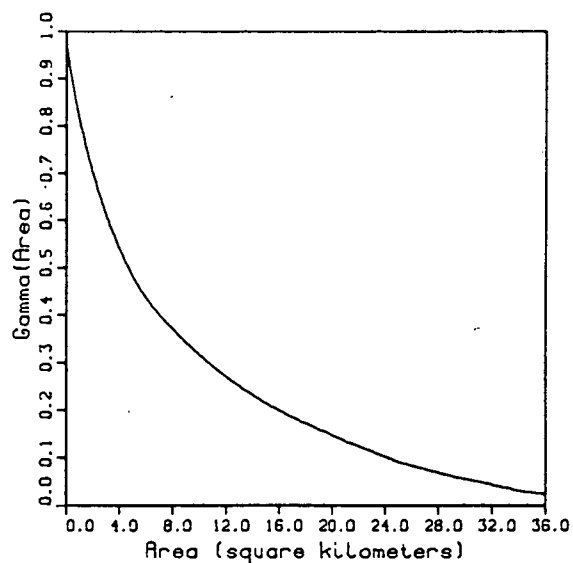
Storm Day
July 7, 1975



Spatial Correlation



Variance Function



Storm Day July 7 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 9.220$

Variance of Point Depth (mm. sq.): $Var(Y) = 11.848$

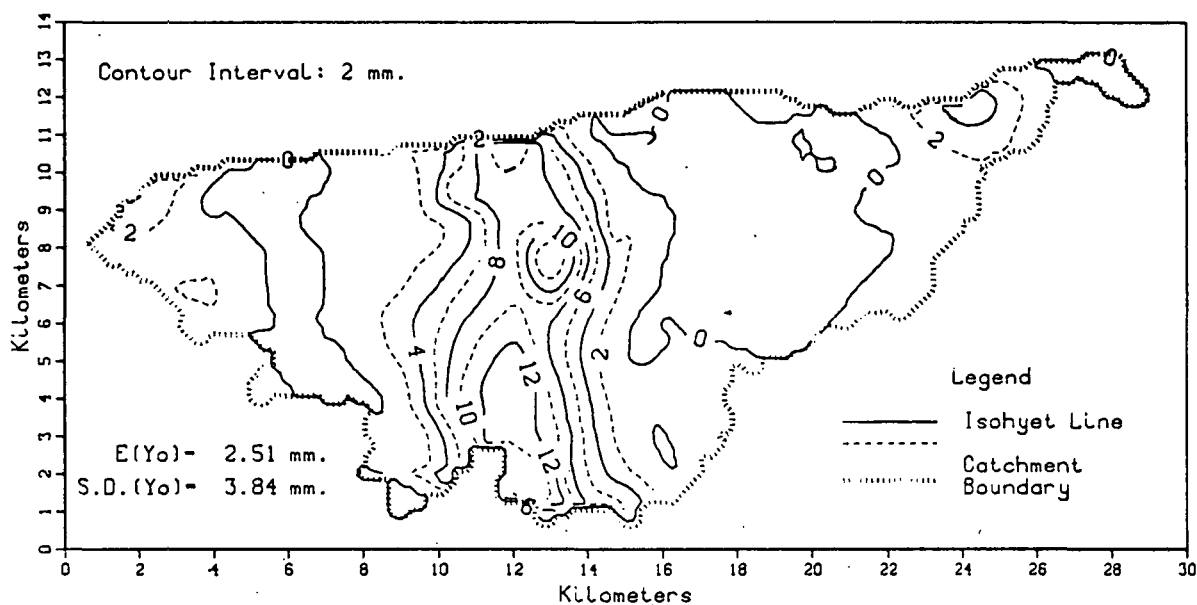
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.579$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.986	0.04	0.976
3	0.996	0.4	0.952	0.16	0.945
4	0.967	0.6	0.906	0.36	0.910
5	0.927	0.8	0.851	0.64	0.867
6	0.804	1.0	0.791	1.00	0.818
7	0.673	1.2	0.728	1.44	0.763
8	0.563	1.4	0.665	1.96	0.706
9	0.475	1.6	0.602	2.56	0.648
10	0.385	1.8	0.543	3.24	0.592
11	0.302	2.0	0.487	4.00	0.539
12	0.213	2.2	0.435	4.84	0.490
13	0.143	2.4	0.389	5.76	0.445
14	0.091	2.6	0.350	6.76	0.408
15	0.055	2.8	0.318	7.84	0.374
16	0.029	3.0	0.292	9.00	0.341
17	0.015	3.2	0.268	10.24	0.309
18	0.010	3.4	0.245	11.56	0.279
19	0.008	3.6	0.222	12.96	0.250
20	0.006	3.8	0.199	14.44	0.223
21	0.004	4.0	0.176	16.00	0.198
22	0.001	4.2	0.153	17.64	0.175
23	0.000	4.4	0.129	19.36	0.154
		4.6	0.105	21.16	0.133
		4.8	0.078	23.04	0.112
		5.0	0.049	25.00	0.090
		5.2	0.018	27.04	0.074
		5.4	-0.015	29.16	0.059
		5.6	-0.048	31.36	0.046
		5.8	-0.079	33.64	0.032
		6.0	-0.106	36.00	0.023

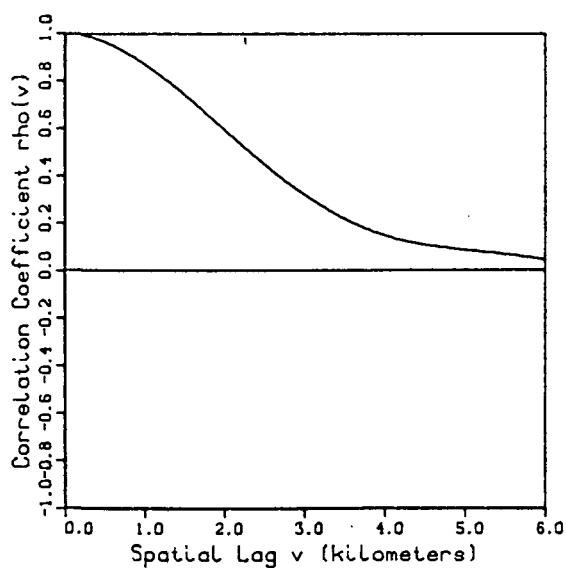
Walnut Gulch, Arizona

Ac=154.21 sq.km.

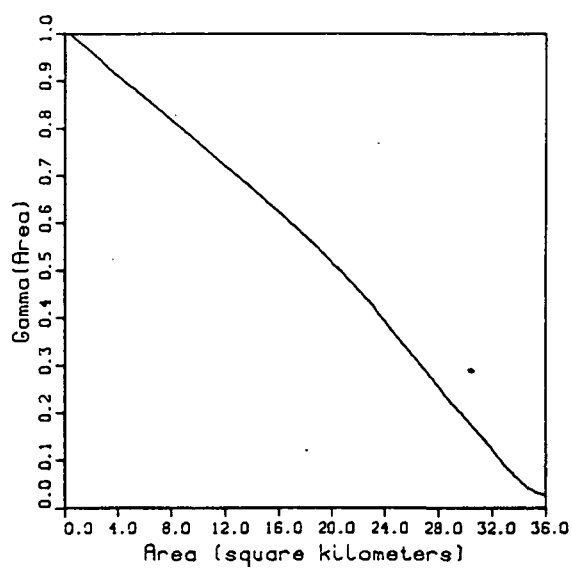
Storm Day
July 8, 1975



Spatial Correlation



Variance Function



Storm Day July 8 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.276$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.724$

Expected Value of Point Depth (mm.): $E(Y) = 2.631$

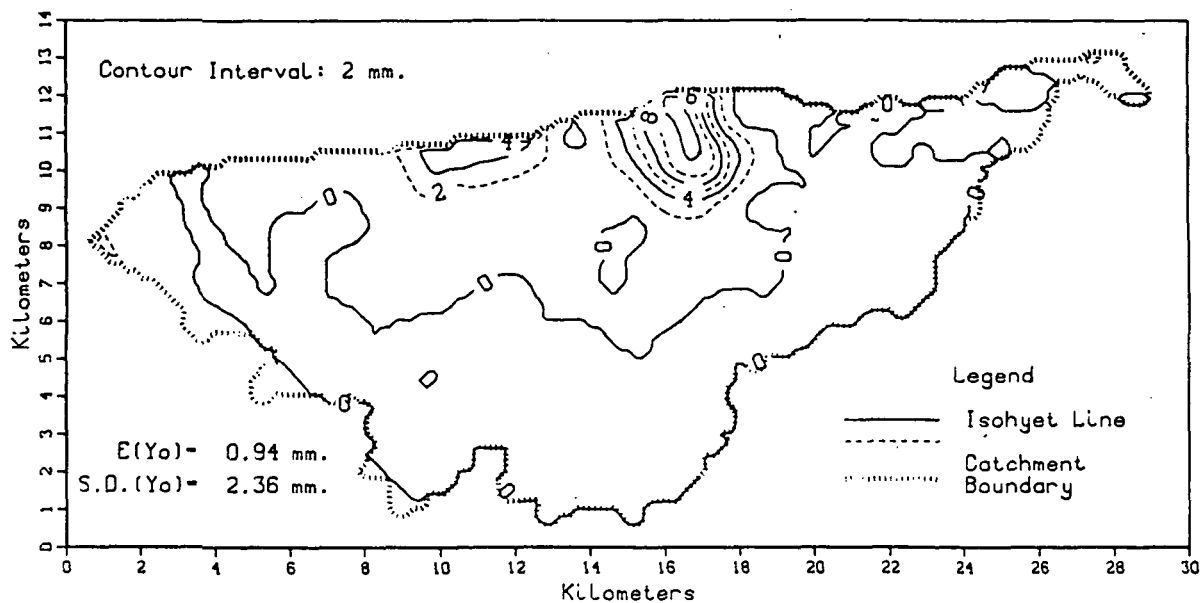
Variance of Point Depth (mm. sq.): $Var(Y) = 14.682$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.553$

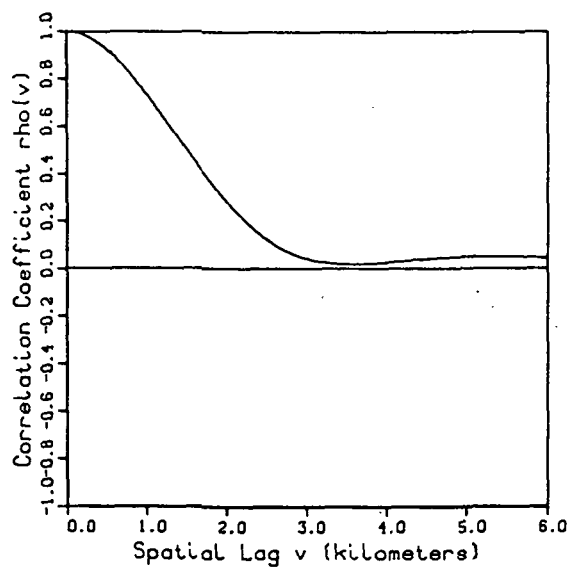
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km. sq.) Gamma (A)	
1	0.451	0.0	1.000	0.00	1.000
2	0.337	0.2	0.993	0.04	1.006
3	0.281	0.4	0.975	0.16	1.006
4	0.242	0.6	0.947	0.36	1.000
5	0.212	0.8	0.911	0.64	0.992
6	0.187	1.0	0.868	1.00	0.983
7	0.162	1.2	0.819	1.44	0.973
8	0.137	1.4	0.767	1.96	0.961
9	0.109	1.6	0.710	2.56	0.945
10	0.077	1.8	0.652	3.24	0.928
11	0.057	2.0	0.593	4.00	0.909
12	0.042	2.2	0.534	4.84	0.889
13	0.022	2.4	0.477	5.76	0.868
14	0.010	2.6	0.421	6.76	0.844
15	0.004	2.8	0.368	7.84	0.819
16	0.000	3.0	0.321	9.00	0.791
		3.2	0.276	10.24	0.761
		3.4	0.236	11.56	0.729
		3.6	0.200	12.96	0.695
		3.8	0.171	14.44	0.659
		4.0	0.147	16.00	0.621
		4.2	0.128	17.64	0.578
		4.4	0.113	19.36	0.533
		4.6	0.101	21.16	0.483
		4.8	0.092	23.04	0.424
		5.0	0.085	25.00	0.354
		5.2	0.078	27.04	0.286
		5.4	0.071	29.16	0.213
		5.6	0.063	31.36	0.145
		5.8	0.053	33.64	0.067
		6.0	0.042	36.00	0.026

Walnut Gulch, Arizona
Ac=154.21 sq.km.

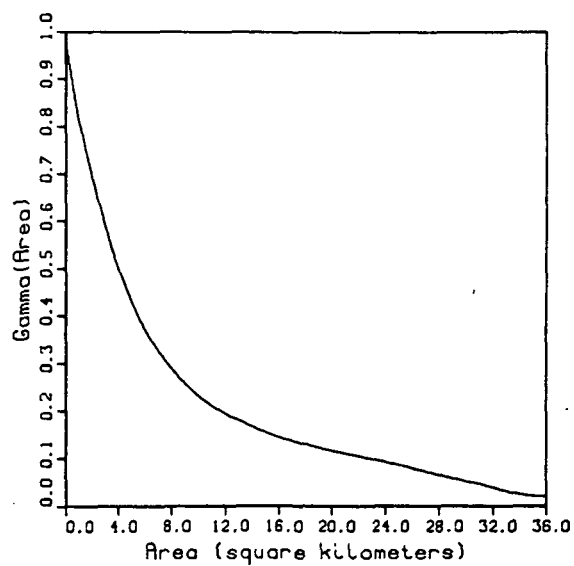
Storm Day
July 10, 1975



Spatial Correlation



Variance Function



Storm Day July 10 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.495$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.505$

Expected Value of Point Depth (mm.): $E(Y) = 0.666$

Variance of Point Depth (mm. sq.): $Var(Y) = 3.441$

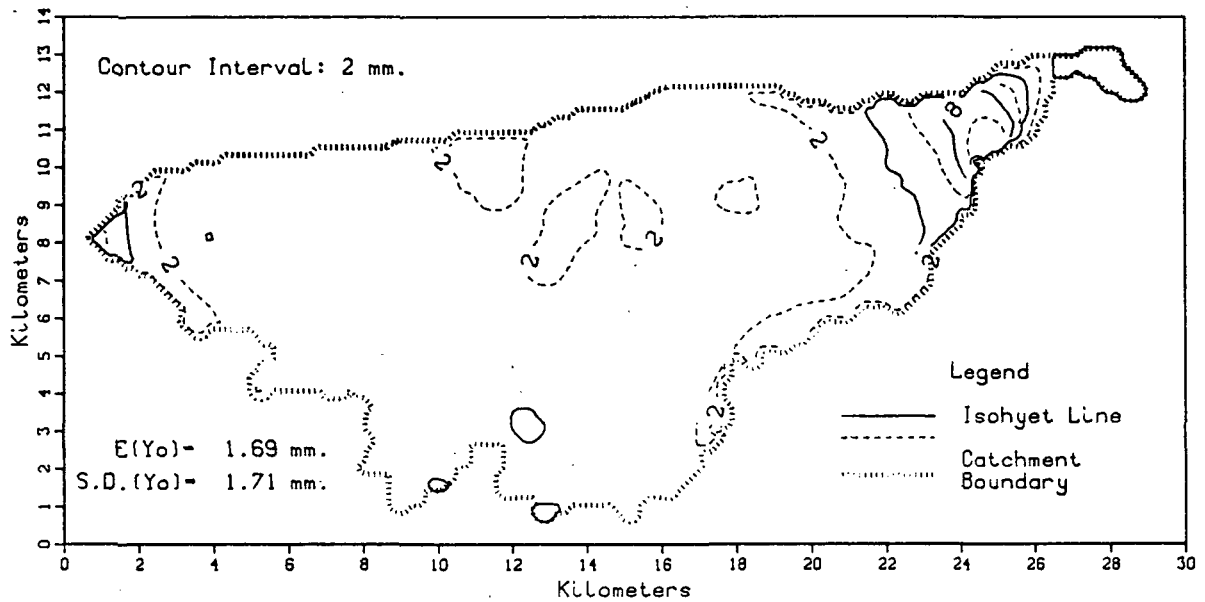
Coef. of Skewness of Point Depth: $S.C.(Y) = 4.277$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.135	0.0	1.000	0.00	1.000
2	0.082	0.2	0.987	0.04	0.982
3	0.062	0.4	0.950	0.16	0.955
4	0.049	0.6	0.892	0.36	0.916
5	0.039	0.8	0.817	0.64	0.869
6	0.030	1.0	0.731	1.00	0.816
7	0.026	1.2	0.638	1.44	0.759
8	0.022	1.4	0.543	1.96	0.697
9	0.018	1.6	0.451	2.56	0.631
10	0.014	1.8	0.364	3.24	0.564
11	0.010	2.0	0.282	4.00	0.499
12	0.005	2.2	0.210	4.84	0.438
13	0.000	2.4	0.148	5.76	0.383
		2.6	0.100	6.76	0.334
		2.8	0.065	7.84	0.292
		3.0	0.042	9.00	0.256
		3.2	0.028	10.24	0.225
		3.4	0.021	11.56	0.200
		3.6	0.020	12.96	0.178
		3.8	0.024	14.44	0.160
		4.0	0.029	16.00	0.143
		4.2	0.035	17.64	0.131
		4.4	0.041	19.36	0.119
		4.6	0.046	21.16	0.108
		4.8	0.049	23.04	0.097
		5.0	0.051	25.00	0.085
		5.2	0.052	27.04	0.071
		5.4	0.052	29.16	0.056
		5.6	0.051	31.36	0.042
		5.8	0.048	33.64	0.026
		6.0	0.043	36.00	0.020

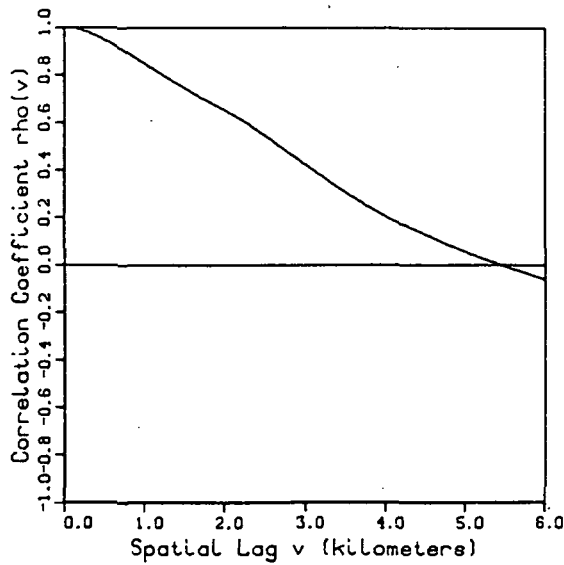
Walnut Gulch, Arizona

Ac=154.21 sq.km.

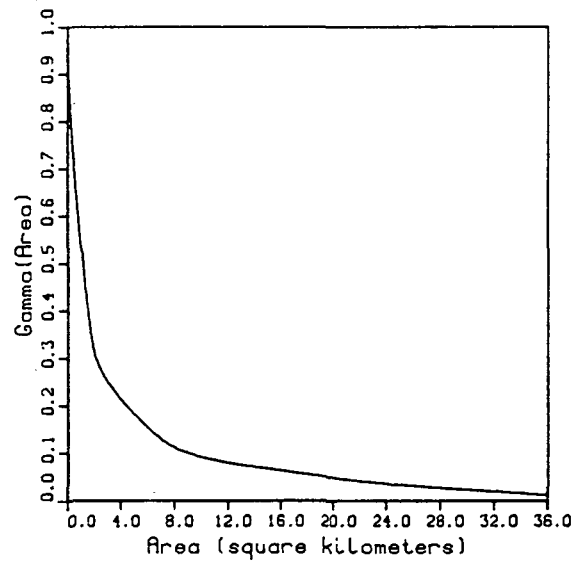
Storm Day
July 11, 1975



Spatial Correlation



Variance Function



Storm Day July 11 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.010$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.990$

Expected Value of Point Depth (mm.): $E(Y) = 1.597$

Variance of Point Depth (mm. sq.): $Var(Y) = 2.674$

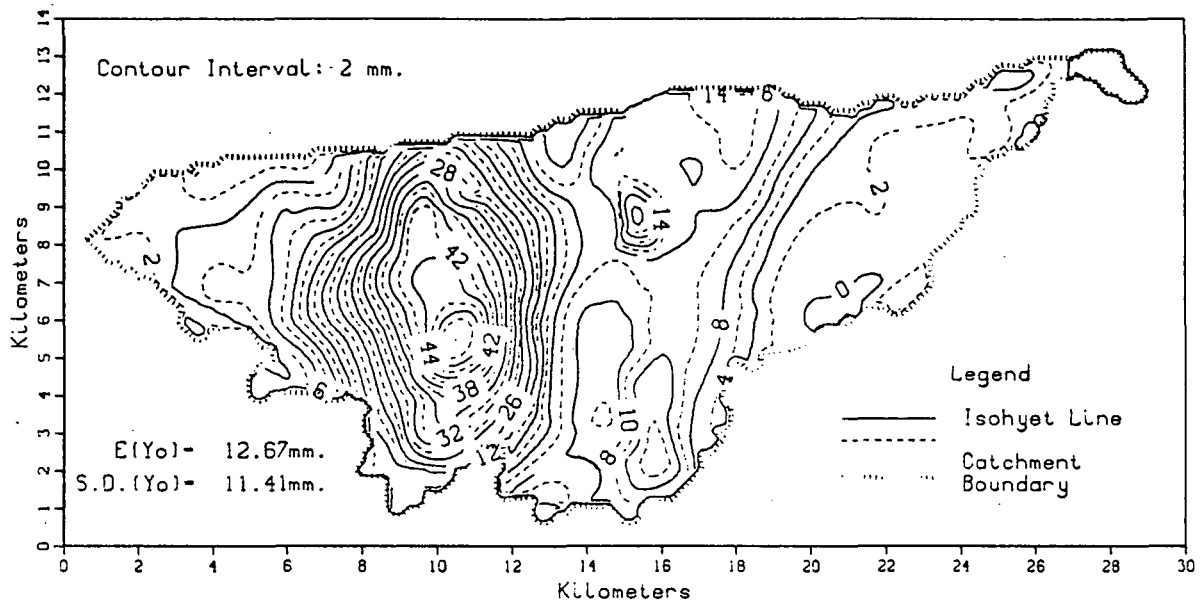
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.775$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.583	0.0	1.000	0.00	1.000
2	0.220	0.2	0.989	0.04	0.925
3	0.107	0.4	0.963	0.16	0.843
4	0.064	0.6	0.928	0.36	0.747
5	0.042	0.8	0.888	0.64	0.643
6	0.030	1.0	0.846	1.00	0.532
7	0.023	1.2	0.803	1.44	0.414
8	0.016	1.4	0.761	1.96	0.317
9	0.010	1.6	0.722	2.56	0.270
10	0.005	1.8	0.684	3.24	0.240
11	0.001	2.0	0.649	4.00	0.211
12	0.000	2.2	0.611	4.84	0.185
		2.4	0.565	5.76	0.159
		2.6	0.517	6.76	0.134
		2.8	0.468	7.84	0.112
		3.0	0.419	9.00	0.099
		3.2	0.372	10.24	0.089
		3.4	0.325	11.56	0.081
		3.6	0.281	12.96	0.074
		3.8	0.240	14.44	0.068
		4.0	0.200	16.00	0.063
		4.2	0.169	17.64	0.056
		4.4	0.140	19.36	0.050
		4.6	0.110	21.16	0.043
		4.8	0.080	23.04	0.037
		5.0	0.051	25.00	0.032
		5.2	0.025	27.04	0.028
		5.4	0.001	29.16	0.024
		5.6	-.021	31.36	0.020
		5.8	-.043	33.64	0.016
		6.0	-.065	36.00	0.011

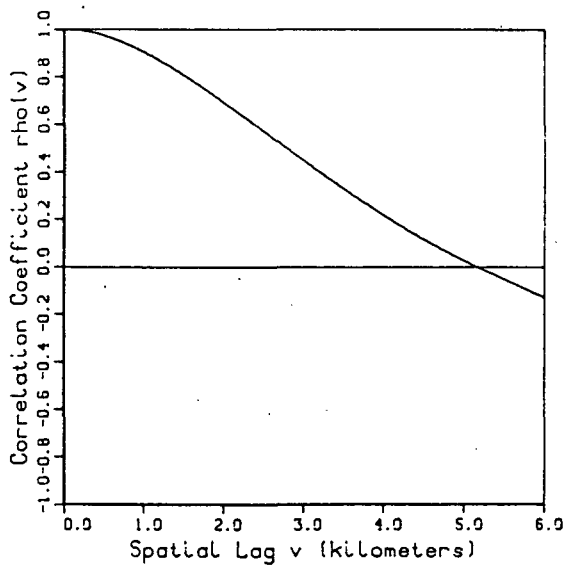
Walnut Gulch, Arizona

Ac=154.21 sq.km.

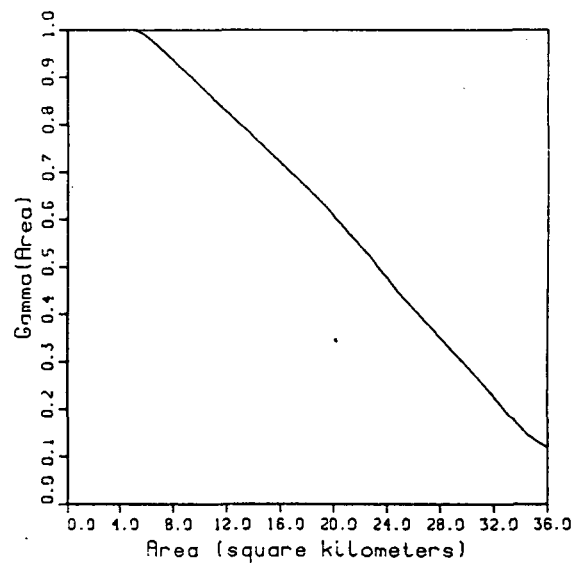
Storm Day
July 12, 1975



Spatial Correlation



Variance Function



Storm Day July 12 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.013$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.987$

Expected Value of Point Depth (mm.): $E(Y) = 13.577$

Variance of Point Depth (mm. sq.): $Var(Y) = 148.826$

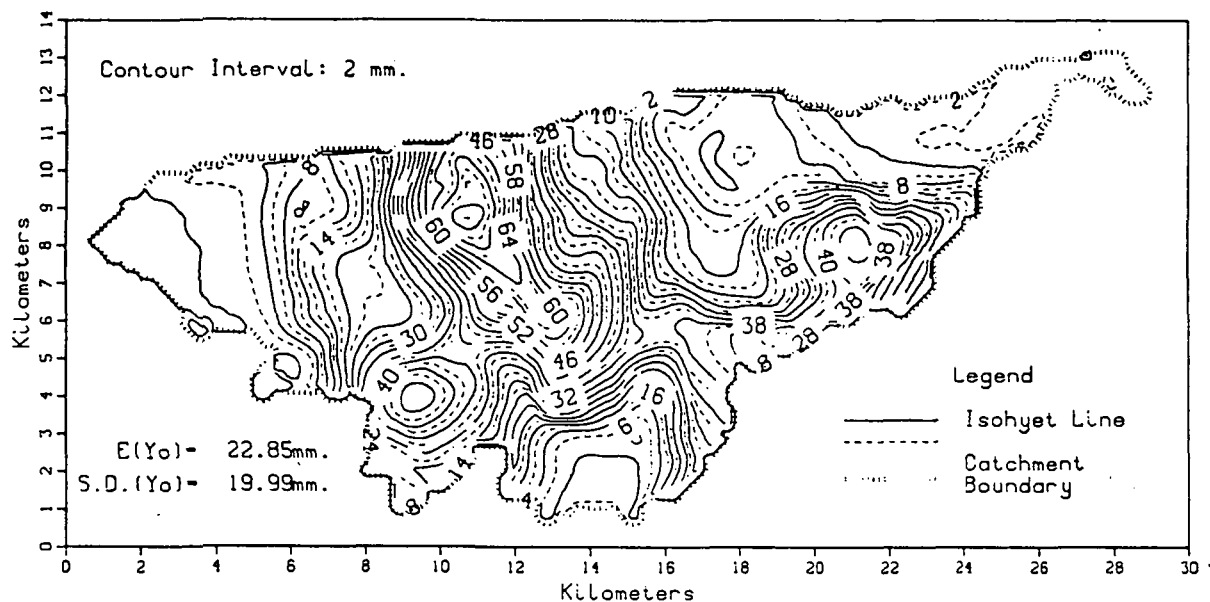
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.214$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c(Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.935	0.0	1.000	0.00	1.000
3	0.809	0.2	0.995	0.04	1.020
5	0.740	0.4	0.982	0.16	1.036
7	0.663	0.6	0.961	0.36	1.048
9	0.565	0.8	0.934	0.64	1.055
11	0.469	1.0	0.902	1.00	1.058
13	0.367	1.2	0.866	1.44	1.058
15	0.288	1.4	0.826	1.96	1.055
17	0.265	1.6	0.783	2.56	1.049
19	0.245	1.8	0.738	3.24	1.040
21	0.221	2.0	0.691	4.00	1.027
23	0.202	2.2	0.643	4.84	1.010
25	0.183	2.4	0.594	5.76	0.989
27	0.165	2.6	0.544	6.76	0.965
29	0.148	2.8	0.494	7.84	0.938
31	0.131	3.0	0.445	9.00	0.907
33	0.115	3.2	0.396	10.24	0.874
35	0.099	3.4	0.349	11.56	0.837
37	0.082	3.6	0.303	12.96	0.799
39	0.067	3.8	0.258	14.44	0.760
41	0.053	4.0	0.214	16.00	0.718
43	0.037	4.2	0.172	17.64	0.673
45	0.021	4.4	0.131	19.36	0.625
47	0.011	4.6	0.093	21.16	0.569
49	0.007	4.8	0.057	23.04	0.509
51	0.002	5.0	0.023	25.00	0.439
		5.4	-0.042	29.16	0.313
		5.6	-0.072	31.36	0.248
		5.8	-0.103	33.64	0.171
		6.0	-0.134	36.00	0.119

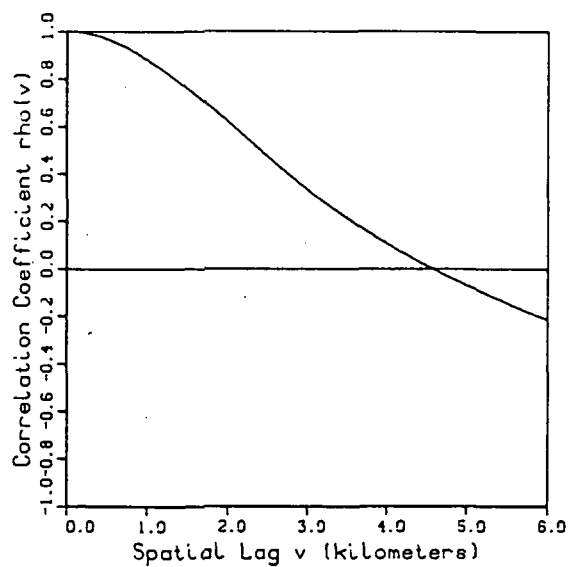
Walnut Gulch, Arizona

Ac-154.21 sq.km.

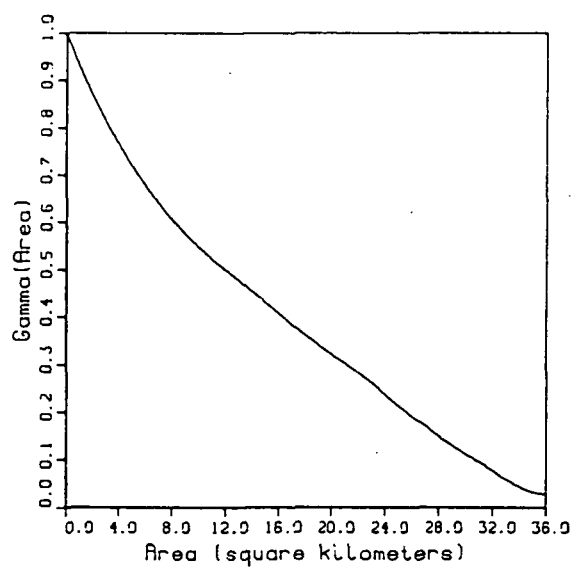
Storm Day
July 17, 1975



Spatial Correlation



Variance Function



Storm Day July 17 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.032$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.968$

Expected Value of Point Depth (mm.): $E(Y) = 23.926$

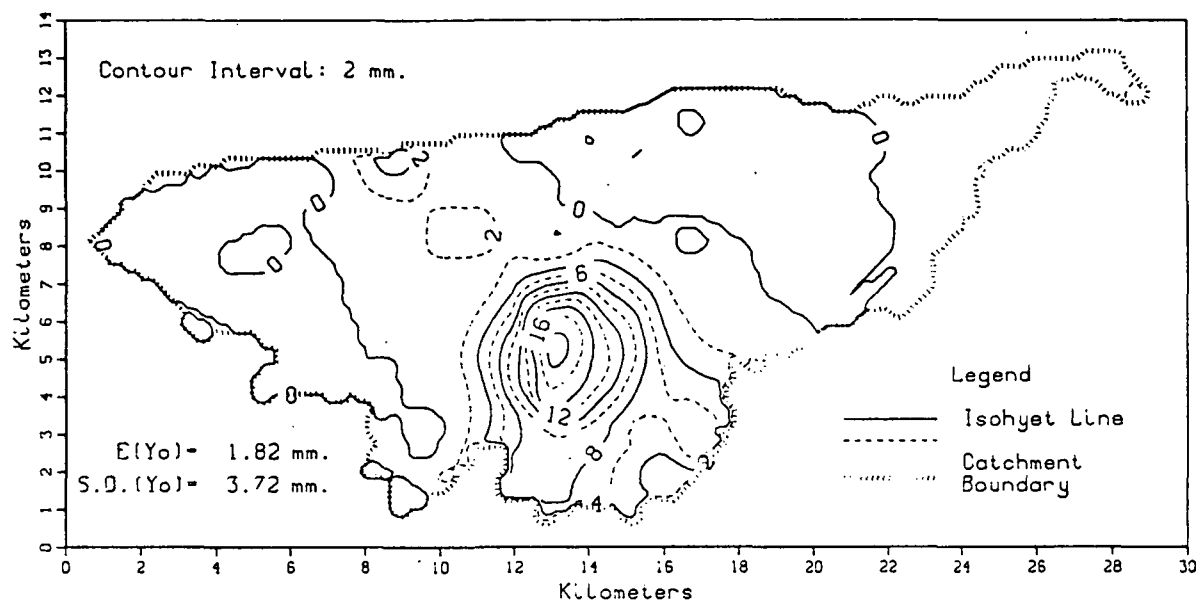
Variance of Point Depth (mm. sq.): $Var(Y) = 344.302$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.562$

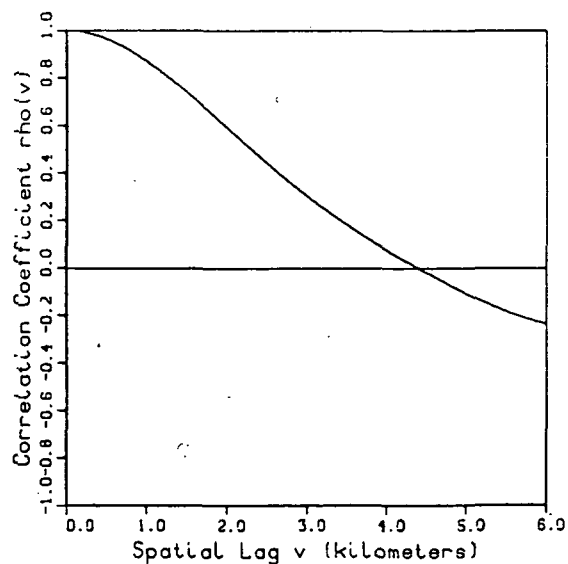
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.935	0.0	1.000	0.00	1.000
3	0.858	0.2	0.994	0.04	0.997
5	0.809	0.4	0.978	0.16	0.988
7	0.771	0.6	0.952	0.36	0.974
9	0.717	0.8	0.918	0.64	0.954
11	0.668	1.0	0.877	1.00	0.930
13	0.638	1.2	0.831	1.44	0.901
15	0.607	1.4	0.782	1.96	0.869
17	0.573	1.6	0.728	2.56	0.836
19	0.542	1.8	0.673	3.24	0.800
21	0.513	2.0	0.615	4.00	0.763
23	0.478	2.2	0.556	4.84	0.724
25	0.451	2.4	0.498	5.76	0.685
27	0.424	2.6	0.440	6.76	0.646
29	0.395	2.8	0.384	7.84	0.609
31	0.365	3.0	0.330	9.00	0.574
33	0.331	3.2	0.279	10.24	0.540
35	0.297	3.4	0.231	11.56	0.508
37	0.261	3.6	0.185	12.96	0.477
39	0.228	3.8	0.142	14.44	0.444
41	0.192	4.0	0.101	16.00	0.407
43	0.160	4.2	0.062	17.64	0.369
45	0.136	4.4	0.025	19.36	0.333
47	0.119	4.6	-.009	21.16	0.298
49	0.104	4.8	-.043	23.04	0.258
51	0.094	5.0	-.075	25.00	0.211
53	0.085	5.2	-.105	27.04	0.169
55	0.077	5.4	-.135	29.16	0.125
57	0.069	5.6	-.164	31.36	0.088
59	0.059	5.8	-.192	33.64	0.048
61	0.049	6.0	-.218	36.00	0.027
63	0.038				
65	0.025				
67	0.017				
69	0.011				
71	0.005				
73	0.001				
75	0.000				

Walnut Gulch, Arizona
Ac=154.21 sq.km.

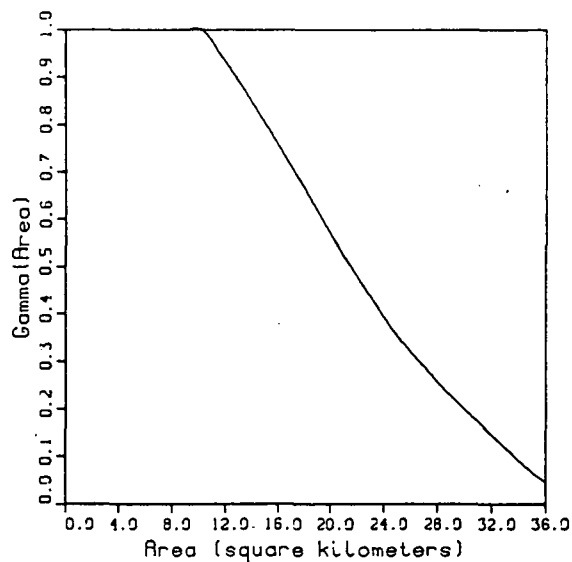
Storm Day
July 18, 1975



Spatial Correlation



Variance Function



Storm Day July 18 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.345$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.655$

Expected Value of Point Depth (mm.): $E(Y) = 2.205$

Variance of Point Depth (mm. sq.): $Var(Y) = 15.988$

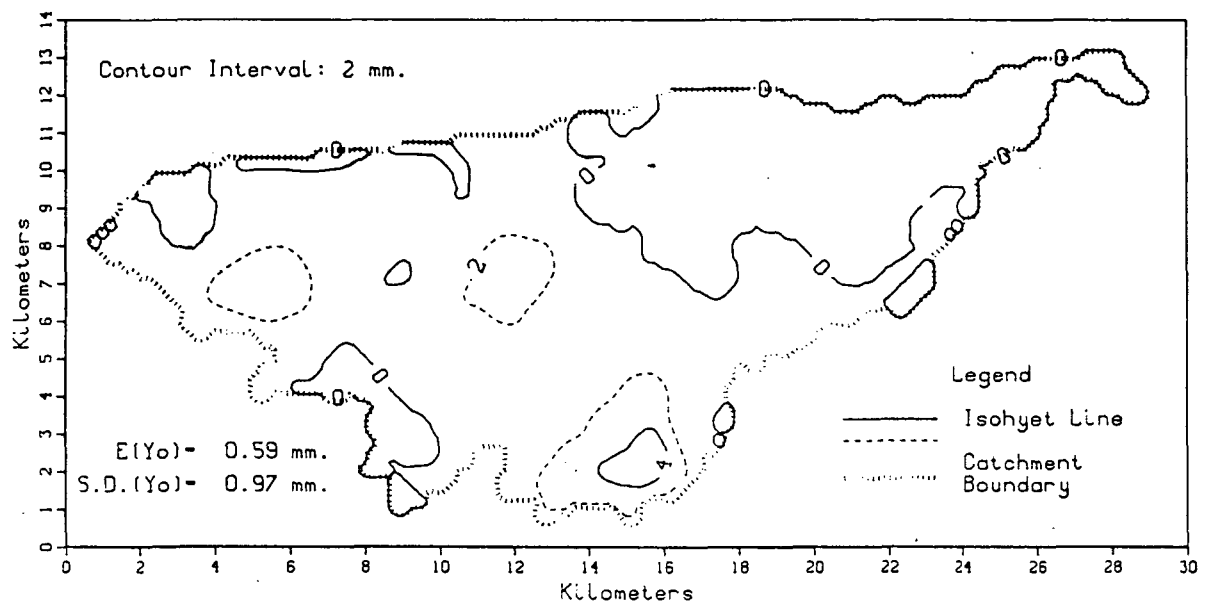
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.356$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.347	0.0	1.000	0.00	1.000
2	0.263	0.2	0.994	0.04	1.035
3	0.225	0.4	0.976	0.16	1.066
4	0.193	0.6	0.948	0.36	1.091
5	0.168	0.8	0.912	0.64	1.111
6	0.144	1.0	0.869	1.00	1.129
7	0.117	1.2	0.819	1.44	1.145
8	0.101	1.4	0.766	1.96	1.156
9	0.083	1.6	0.708	2.56	1.161
10	0.063	1.8	0.649	3.24	1.161
11	0.054	2.0	0.588	4.00	1.156
12	0.046	2.2	0.528	4.84	1.147
13	0.040	2.4	0.468	5.76	1.132
14	0.034	2.6	0.409	6.76	1.109
15	0.028	2.8	0.353	7.84	1.080
16	0.022	3.0	0.299	9.00	1.044
17	0.016	3.2	0.249	10.24	1.001
18	0.011	3.4	0.201	11.56	0.950
19	0.007	3.6	0.155	12.96	0.891
20	0.003	3.8	0.113	14.44	0.827
21	0.000	4.0	0.072	16.00	0.755
		4.2	0.033	17.64	0.679
		4.4	-.005	19.36	0.598
		4.6	-.041	21.16	0.516
		4.8	-.077	23.04	0.434
		5.0	-.112	25.00	0.352
		5.2	-.144	27.04	0.286
		5.4	-.173	29.16	0.220
		5.6	-.199	31.36	0.163
		5.8	-.222	33.64	0.100
		6.0	-.240	36.00	0.045

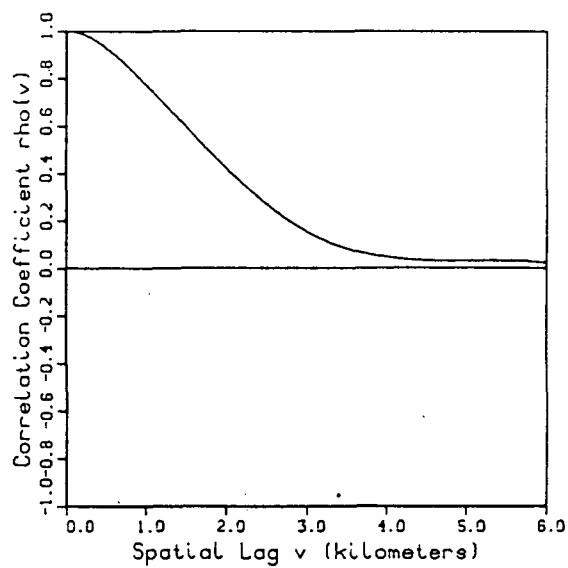
Walnut Gulch, Arizona

Ac=154.21 sq.km.

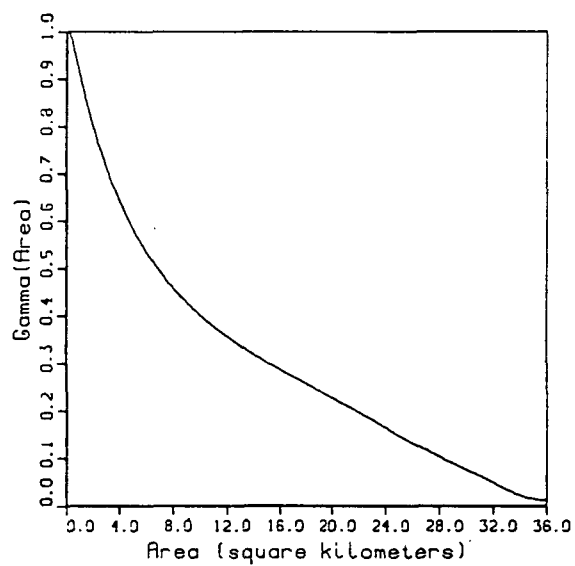
Storm Day
July 19, 1975



Spatial Correlation



Variance Function



Storm Day July 19 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.311$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.689$

Expected Value of Point Depth (mm.): $E(Y) = 0.706$

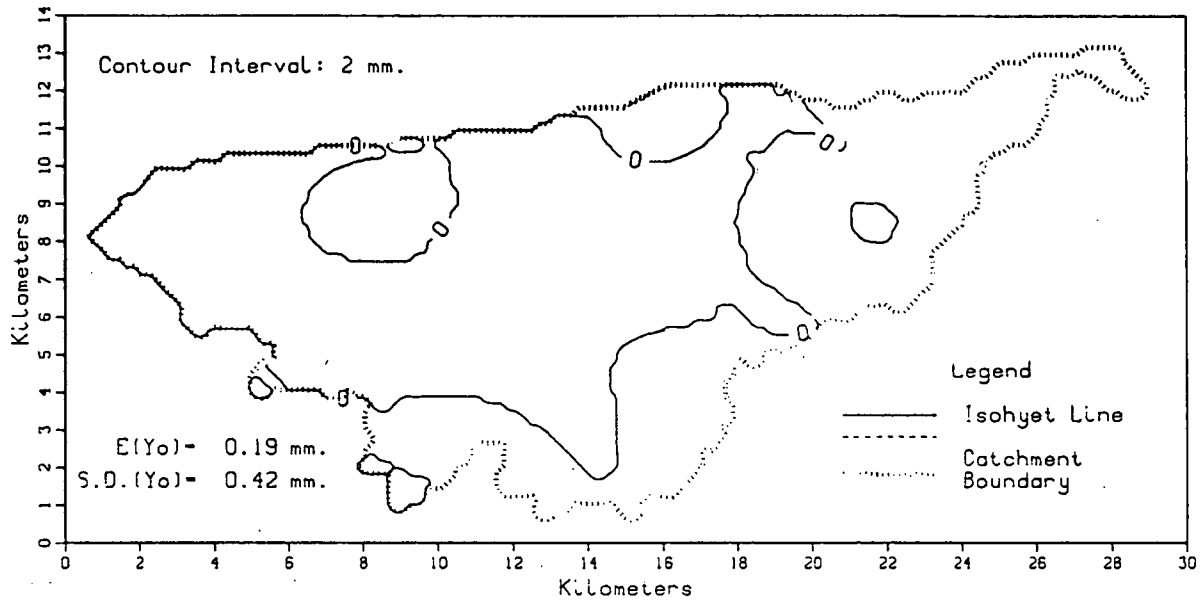
Variance of Point Depth (mm. sq.): $Var(Y) = 0.899$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.750$

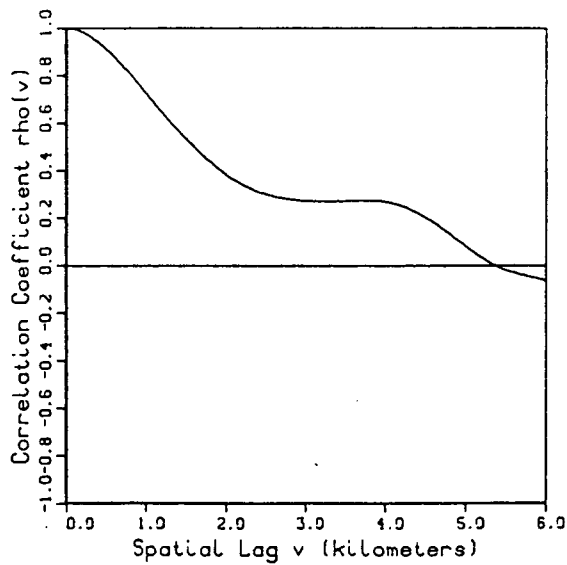
Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	0.268	0.0	1.000	0.00	1.000
2	0.107	0.2	0.987	0.04	1.009
3	0.041	0.4	0.952	0.16	1.005
4	0.012	0.6	0.901	0.36	0.985
5	0.000	0.8	0.840	0.64	0.953
		1.0	0.773	1.00	0.911
		1.2	0.703	1.44	0.860
		1.4	0.631	1.96	0.804
		1.6	0.559	2.56	0.747
		1.8	0.488	3.24	0.691
		2.0	0.421	4.00	0.638
		2.2	0.357	4.84	0.589
		2.4	0.298	5.76	0.543
		2.6	0.243	6.76	0.500
		2.8	0.195	7.84	0.461
		3.0	0.153	9.00	0.426
		3.2	0.119	10.24	0.394
		3.4	0.092	11.56	0.364
		3.6	0.071	12.96	0.336
		3.8	0.056	14.44	0.309
		4.0	0.046	16.00	0.284
		4.2	0.039	17.64	0.260
		4.4	0.034	19.36	0.234
		4.6	0.031	21.16	0.207
		4.8	0.030	23.04	0.179
		5.0	0.031	25.00	0.145
		5.2	0.032	27.04	0.116
		5.4	0.033	29.16	0.086
		5.6	0.032	31.36	0.058
		5.8	0.028	33.64	0.025
		6.0	0.024	36.00	0.013

Walnut Gulch, Arizona
Ac=154.21 sq.km.

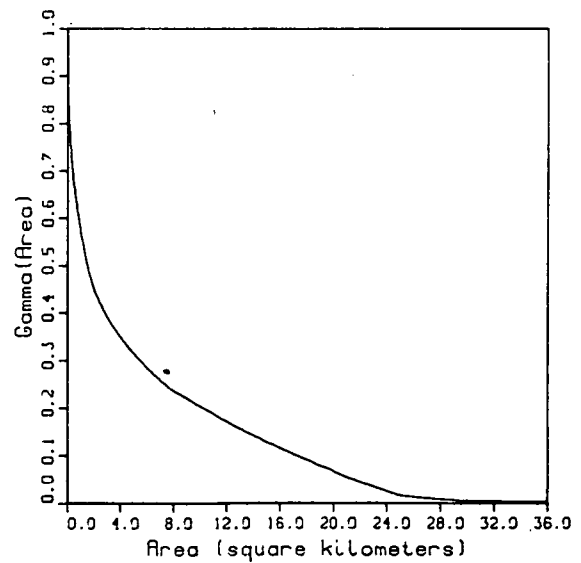
Storm Day
July 20, 1975



Spatial Correlation



Variance Function



Storm Day July 20 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.542$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.458$

Expected Value of Point Depth (mm.): $E(Y) = 0.219$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.154$

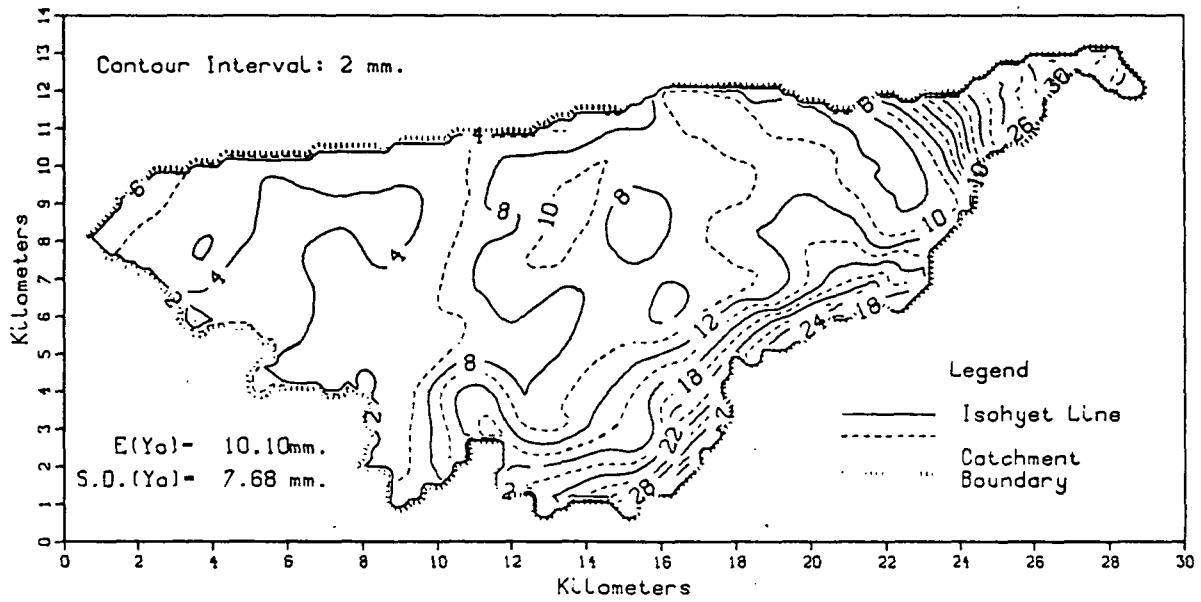
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.975$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.074	0.0	1.000	0.00	1.000
2	0.000	0.2	0.983	0.04	0.899
3	0.000	0.4	0.939	0.16	0.800
		0.6	0.877	0.36	0.711
		0.8	0.803	0.64	0.638
		1.0	0.723	1.00	0.571
		1.2	0.642	1.44	0.506
		1.4	0.565	1.96	0.453
		1.6	0.496	2.56	0.413
		1.8	0.434	3.24	0.380
		2.0	0.379	4.00	0.349
		2.2	0.339	4.84	0.319
		2.4	0.308	5.76	0.291
		2.6	0.288	6.76	0.263
		2.8	0.276	7.84	0.238
		3.0	0.270	9.00	0.218
		3.2	0.268	10.24	0.198
		3.4	0.270	11.56	0.177
		3.6	0.272	12.96	0.155
		3.8	0.272	14.44	0.135
		4.0	0.265	16.00	0.114
		4.2	0.248	17.64	0.094
		4.4	0.218	19.36	0.073
		4.6	0.179	21.16	0.052
		4.8	0.131	23.04	0.033
		5.0	0.078	25.00	0.015
		5.2	0.030	27.04	0.010
		5.4	-0.009	29.16	0.005
		5.6	-0.032	31.36	0.003
		5.8	-0.050	33.64	0.002
		6.0	-0.065	36.00	0.002

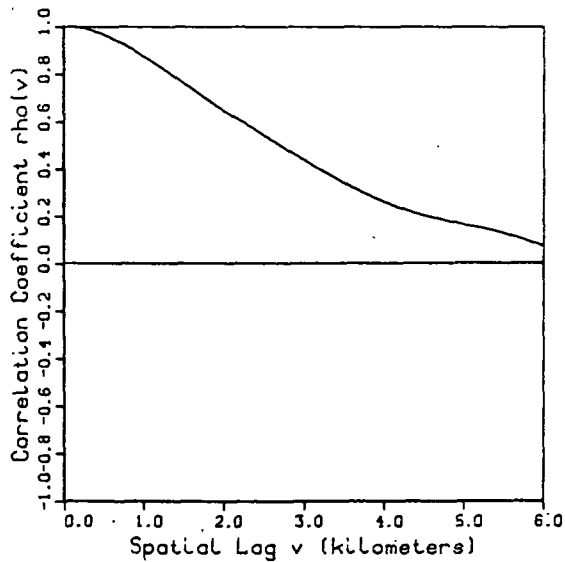
Walnut Gulch, Arizona

Ac=154.21 sq.km.

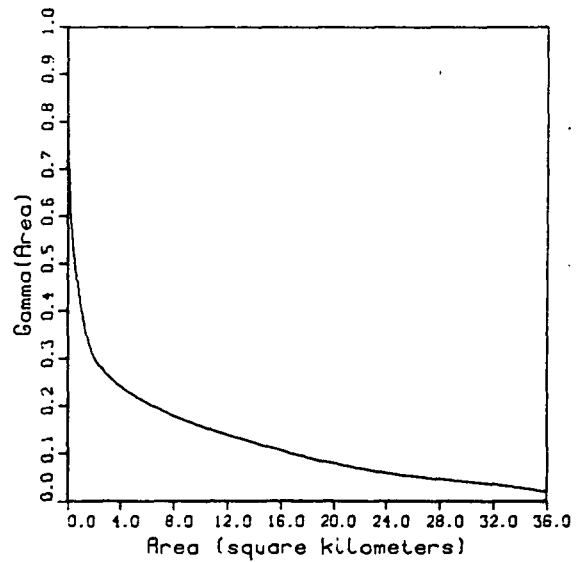
Storm Day
July 21, 1975



Spatial Correlation



Variance Function



Storm Day July 21 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 9.960$

Variance of Point Depth (mm. sq.): $Var(Y) = 39.055$

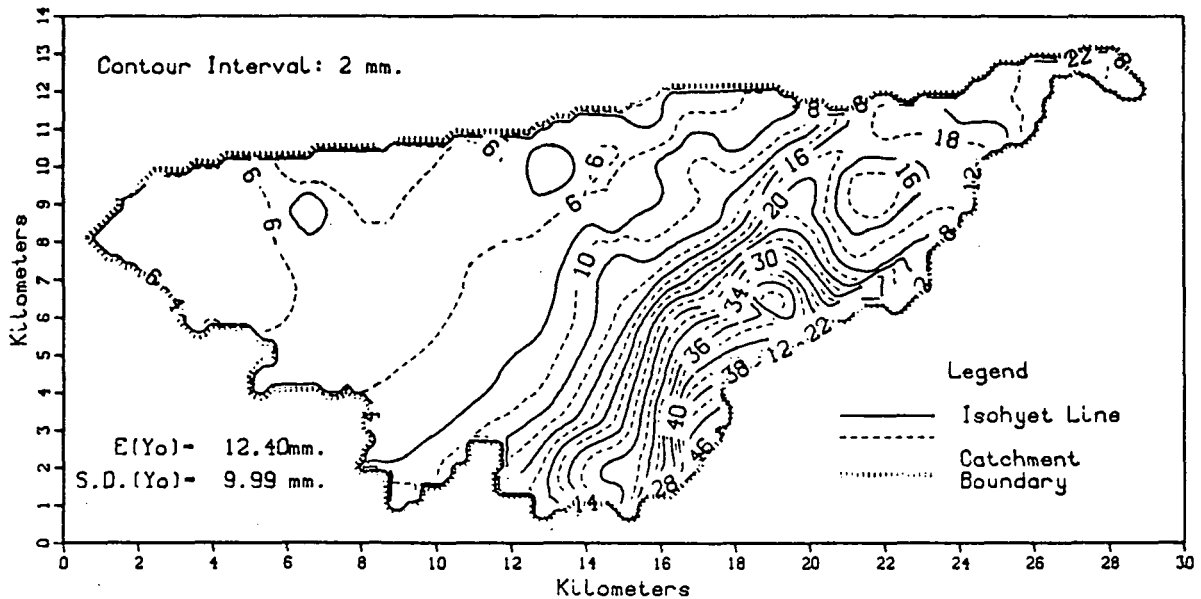
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.742$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
3	0.995	0.2	0.994	0.04	0.834
5	0.765	0.4	0.976	0.16	0.683
7	0.668	0.6	0.949	0.36	0.568
9	0.448	0.8	0.914	0.64	0.487
11	0.264	1.0	0.872	1.00	0.416
13	0.187	1.2	0.829	1.44	0.351
15	0.141	1.4	0.783	1.96	0.305
17	0.110	1.6	0.736	2.56	0.279
19	0.083	1.8	0.690	3.24	0.258
21	0.063	2.0	0.644	4.00	0.240
23	0.048	2.2	0.603	4.84	0.223
25	0.037	2.4	0.561	5.76	0.208
27	0.027	2.6	0.518	6.76	0.193
29	0.018	2.8	0.476	7.84	0.179
31	0.011	3.0	0.435	9.00	0.166
33	0.006	3.2	0.394	10.24	0.153
35	0.003	3.4	0.355	11.56	0.141
37	0.000	3.6	0.319	12.96	0.129
39	0.000	3.8	0.285	14.44	0.117
		4.2	0.231	17.64	0.092
		4.4	0.209	19.36	0.081
		4.6	0.192	21.16	0.071
		4.8	0.177	23.04	0.062
		5.0	0.161	25.00	0.053
		5.2	0.149	27.04	0.048
		5.4	0.133	29.16	0.042
		5.6	0.114	31.36	0.036
		5.8	0.093	33.64	0.028
		6.0	0.070	36.00	0.018

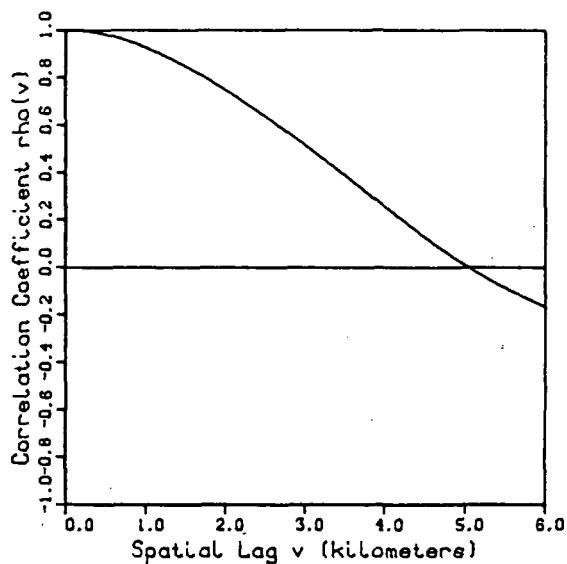
Walnut Gulch, Arizona

Ac=154.21 sq.km.

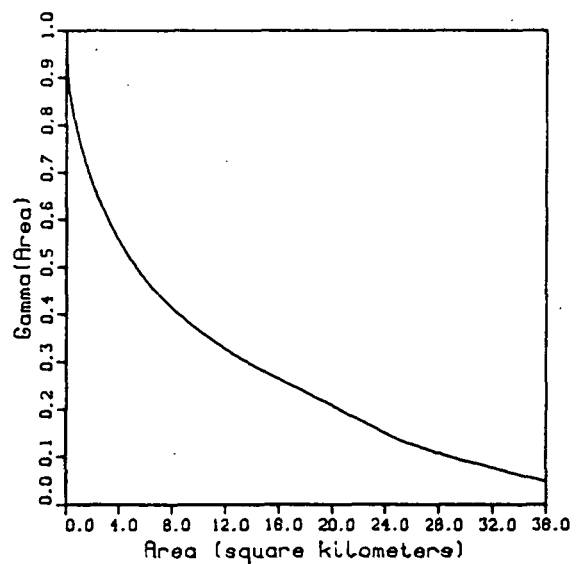
Storm Day
July 22, 1975



Spatial Correlation



Variance Function



Storm Day July 22 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 13.452$

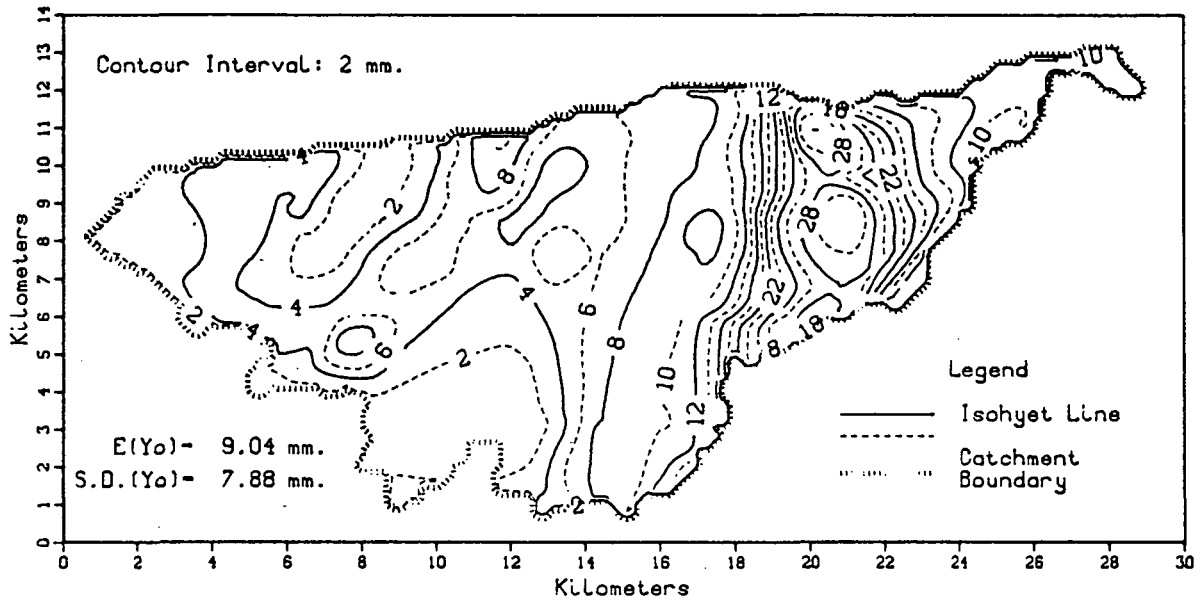
Variance of Point Depth (mm. sq.): $Var(Y)=101.800$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.396$

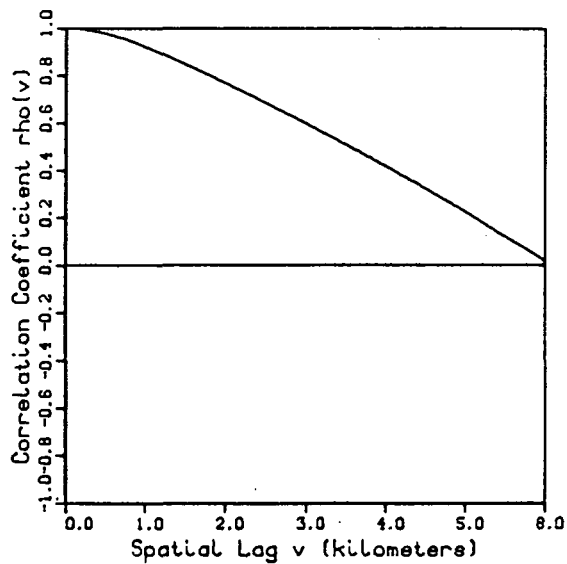
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
3	0.997	0.2	0.996	0.04	0.948
5	0.941	0.4	0.986	0.16	0.898
7	0.577	0.6	0.970	0.36	0.851
9	0.475	0.8	0.949	0.64	0.809
11	0.414	1.0	0.924	1.00	0.766
13	0.375	1.2	0.894	1.44	0.723
15	0.337	1.4	0.861	1.96	0.680
17	0.289	1.6	0.825	2.56	0.637
19	0.229	1.8	0.786	3.24	0.595
21	0.190	2.0	0.745	4.00	0.555
23	0.159	2.2	0.701	4.84	0.516
25	0.136	2.4	0.656	5.76	0.481
27	0.116	2.6	0.610	6.76	0.447
29	0.095	2.8	0.562	7.84	0.416
31	0.079	3.0	0.513	9.00	0.387
33	0.066	3.2	0.463	10.24	0.360
35	0.055	3.4	0.412	11.56	0.334
37	0.044	3.6	0.360	12.96	0.309
39	0.032	3.8	0.307	14.44	0.286
41	0.019	4.0	0.255	16.00	0.263
43	0.011	4.2	0.202	17.64	0.239
45	0.008	4.4	0.150	19.36	0.215
47	0.005	4.6	0.101	21.16	0.190
49	0.002	4.8	0.053	23.04	0.164
		5.2	-.034	27.04	0.116
		5.4	-.072	29.16	0.096
		5.6	-.107	31.36	0.081
		5.8	-.140	33.64	0.063
		6.0	-.170	36.00	0.049

Walnut Gulch, Arizona
Ac=154.21 sq.km.

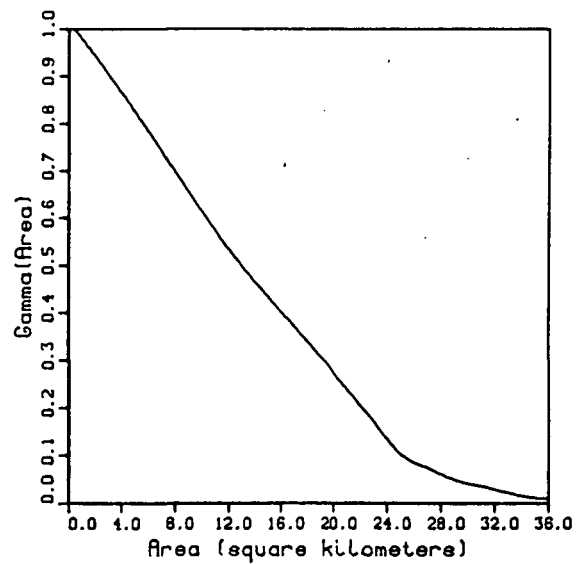
Storm Day
July 23, 1975



Spatial Correlation



Variance Function



Storm Day July 23 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 8.849$

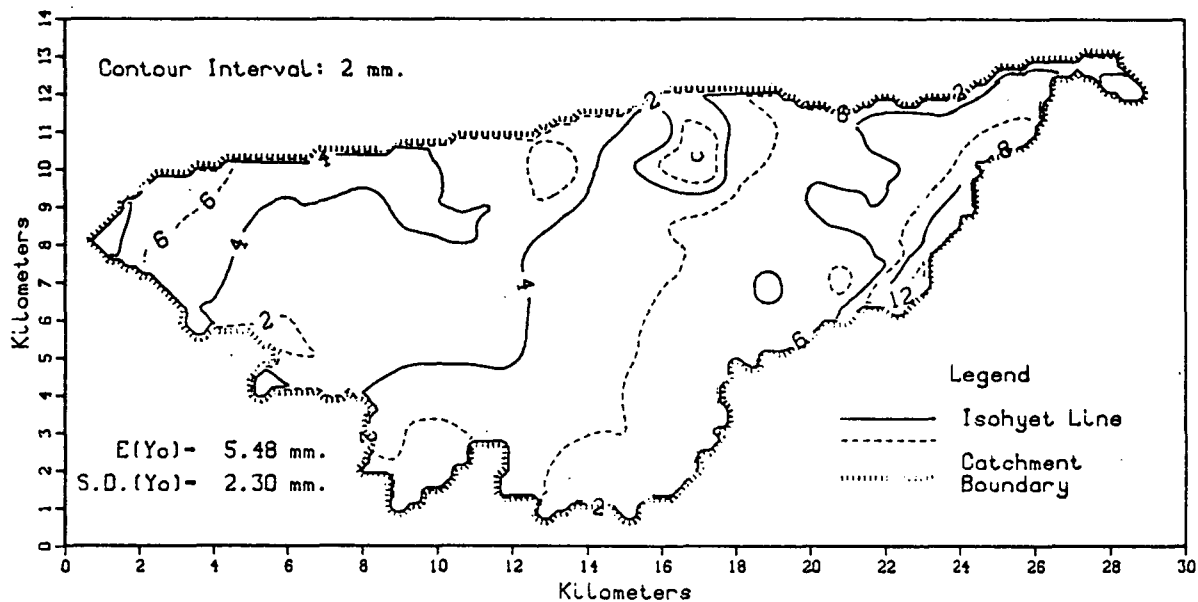
Variance of Point Depth (mm. sq.): $Var(Y) = 57.206$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.431$

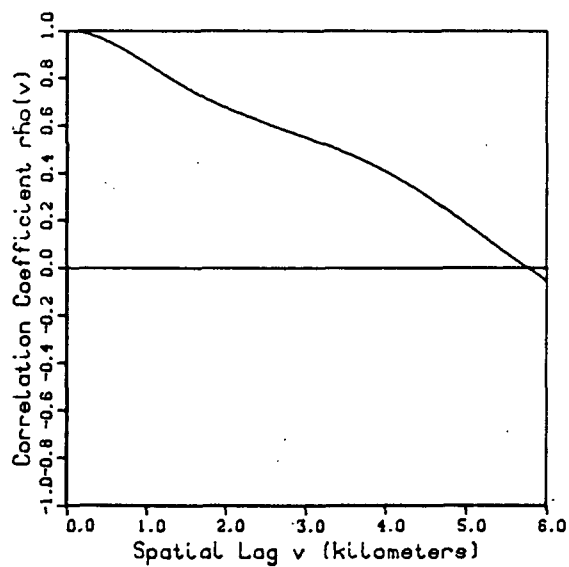
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.953	0.0	1.000	0.00	1.000
2	0.897	0.2	0.996	0.04	1.007
3	0.833	0.4	0.984	0.16	1.008
4	0.732	0.6	0.967	0.36	1.003
5	0.609	0.8	0.945	0.64	0.993
6	0.531	1.0	0.919	1.00	0.980
7	0.459	1.2	0.890	1.44	0.964
8	0.393	1.4	0.861	1.96	0.945
9	0.322	1.6	0.830	2.56	0.921
10	0.277	1.8	0.798	3.24	0.894
11	0.241	2.0	0.765	4.00	0.863
12	0.220	2.2	0.732	4.84	0.830
13	0.200	2.4	0.698	5.76	0.792
14	0.181	2.6	0.664	6.76	0.750
15	0.166	2.8	0.630	7.84	0.704
16	0.155	3.0	0.595	9.00	0.655
17	0.145	3.2	0.559	10.24	0.603
18	0.136	3.4	0.524	11.56	0.551
19	0.128	3.6	0.488	12.96	0.500
20	0.120	3.8	0.451	14.44	0.451
21	0.111	4.0	0.415	16.00	0.401
22	0.103	4.2	0.377	17.64	0.350
23	0.095	4.4	0.339	19.36	0.294
24	0.087	4.6	0.301	21.16	0.233
25	0.077	4.8	0.263	23.04	0.169
26	0.068	5.0	0.224	25.00	0.101
27	0.056	5.2	0.182	27.04	0.073
28	0.041	5.4	0.140	29.16	0.046
29	0.026	5.6	0.100	31.36	0.033
30	0.015	5.8	0.060	33.64	0.017
31	0.007	6.0	0.019	36.00	0.009
32	0.000				
33	0.000				

Walnut Gulch, Arizona
Ac=154.21 sq.km.

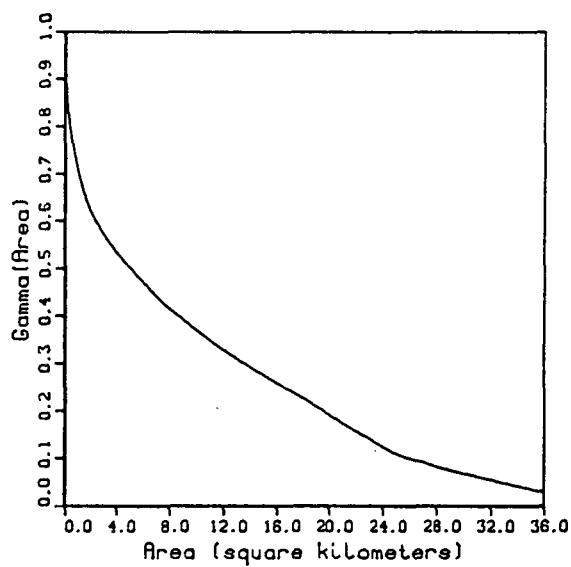
Storm Day
July 24, 1975



Spatial Correlation



Variance Function



Storm Day July 24 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c) = 0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c) = 1.000$

Expected Value of Point Depth (mm.): $E(Y) = 5.522$

Variance of Point Depth (mm. sq.): $Var(Y) = 5.130$

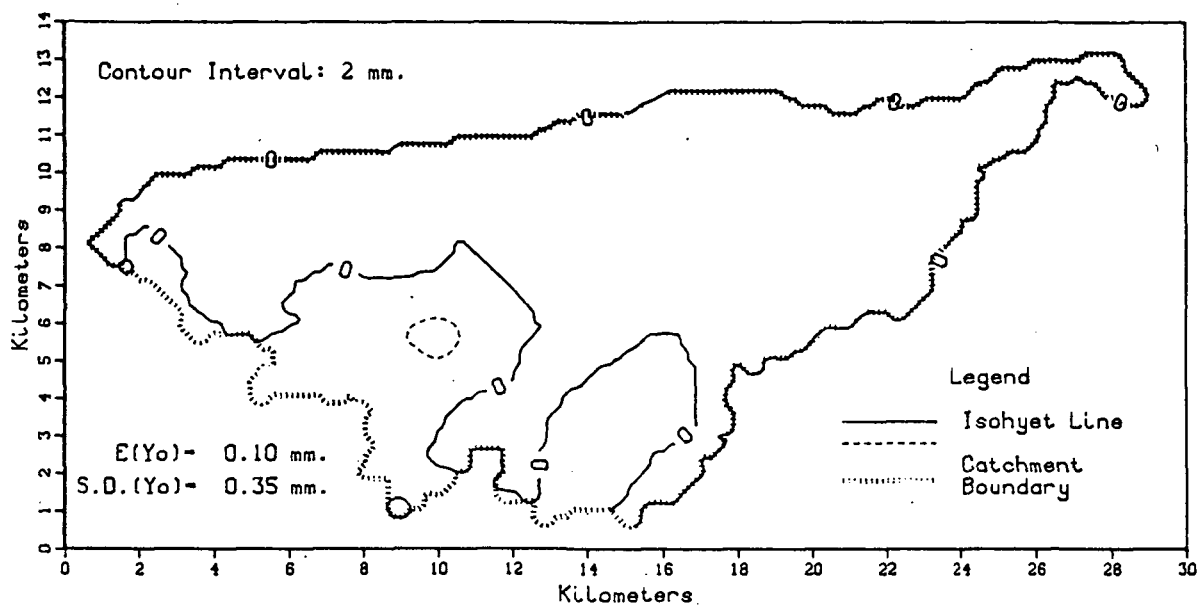
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.772$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.994	0.0	1.000	0.00	1.000
2	0.973	0.2	0.992	0.04	0.933
3	0.880	0.4	0.970	0.16	0.869
4	0.709	0.6	0.938	0.36	0.813
5	0.544	0.8	0.900	0.64	0.760
6	0.394	1.0	0.859	1.00	0.712
7	0.240	1.2	0.816	1.44	0.665
8	0.108	1.4	0.775	1.96	0.624
9	0.049	1.6	0.737	2.56	0.592
10	0.032	1.8	0.702	3.24	0.562
11	0.020	2.0	0.672	4.00	0.533
12	0.012	2.2	0.644	4.84	0.504
13	0.008	2.4	0.619	5.76	0.476
14	0.003	2.6	0.594	6.76	0.446
15	0.000	2.8	0.570	7.84	0.416
16	0.000	3.0	0.546	9.00	0.389
		3.2	0.522	10.24	0.362
		3.4	0.496	11.56	0.335
		3.6	0.467	12.96	0.309
		3.8	0.437	14.44	0.283
		4.0	0.403	16.00	0.257
		4.2	0.366	17.64	0.230
		4.4	0.325	19.36	0.201
		4.6	0.280	21.16	0.170
		4.8	0.233	23.04	0.139
		5.0	0.184	25.00	0.108
		5.2	0.134	27.04	0.090
		5.4	0.084	29.16	0.073
		5.6	0.037	31.36	0.059
		5.8	-0.010	33.64	0.044
		6.0	-0.059	36.00	0.030

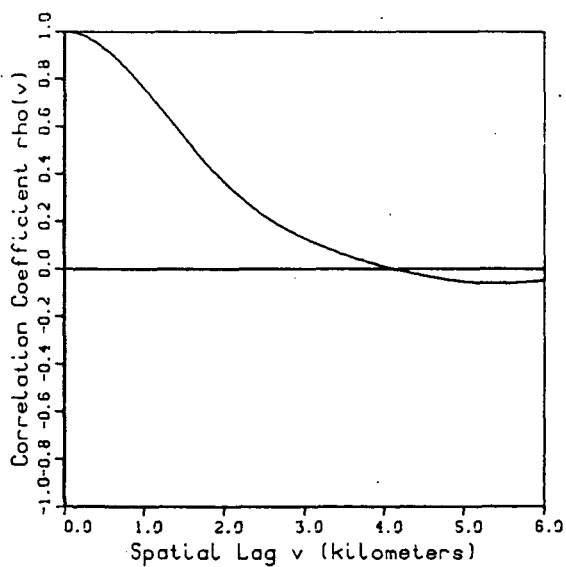
Walnut Gulch, Arizona

Ac=154.21 sq.km.

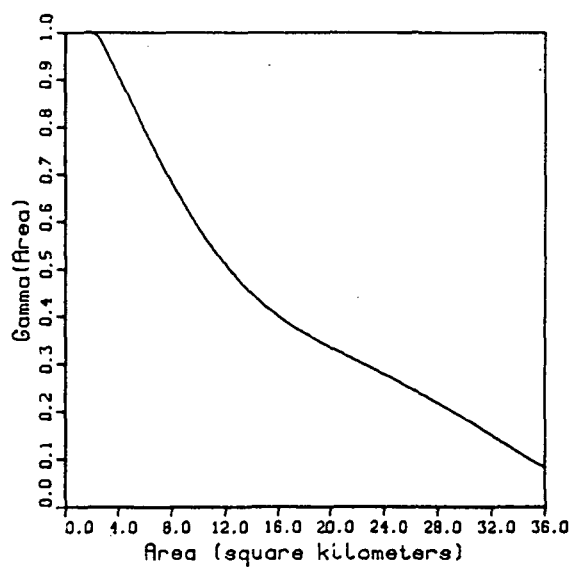
Storm Day
July 25, 1975



Spatial Correlation



Variance Function



Storm Day July 25 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.720$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.280$

Expected Value of Point Depth (mm.): $E(Y) = 0.135$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.138$

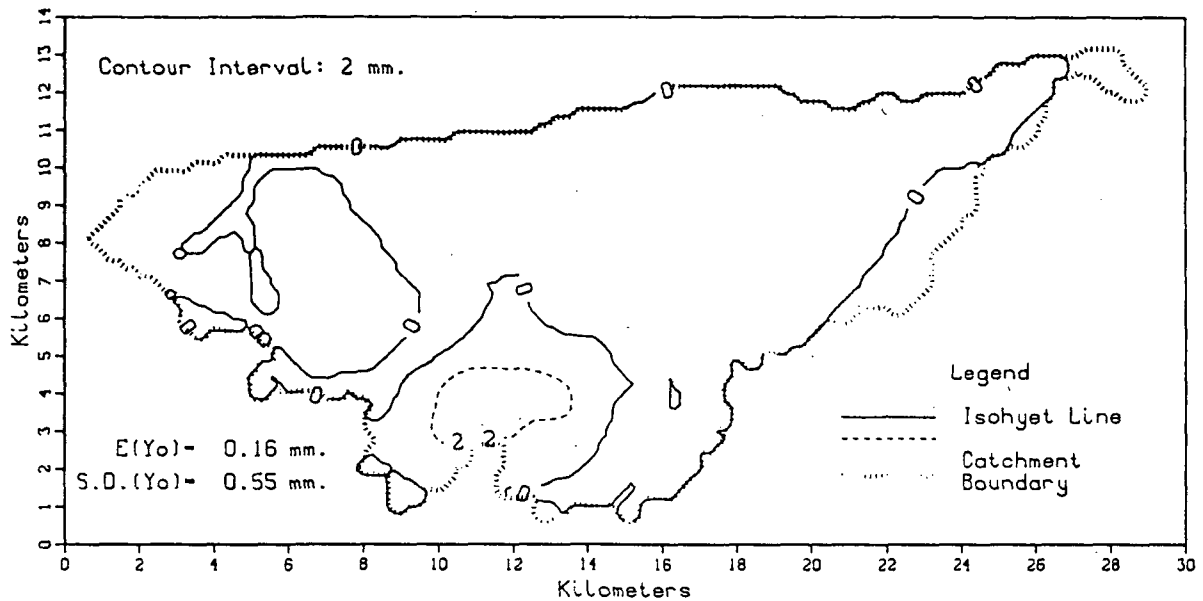
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.413$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho(v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.057	0.0	1.000	0.00	1.000
2	0.007	0.2	0.988	0.04	1.027
3	0.000	0.4	0.954	0.16	1.047
		0.6	0.903	0.36	1.055
		0.8	0.837	0.64	1.056
		1.0	0.761	1.00	1.049
		1.2	0.679	1.44	1.036
		1.4	0.595	1.96	1.016
		1.6	0.513	2.56	0.986
		1.8	0.435	3.24	0.950
		2.0	0.364	4.00	0.907
		2.2	0.301	4.84	0.859
		2.4	0.247	5.76	0.804
		2.6	0.200	6.76	0.748
		2.8	0.161	7.84	0.690
		3.0	0.127	9.00	0.632
		3.2	0.097	10.24	0.577
		3.4	0.071	11.56	0.525
		3.6	0.047	12.96	0.478
		3.8	0.025	14.44	0.437
		4.0	0.006	16.00	0.401
		4.2	-.011	17.64	0.370
		4.4	-.026	19.36	0.343
		4.6	-.039	21.16	0.317
		4.8	-.050	23.04	0.291
		5.0	-.059	25.00	0.262
		5.2	-.064	27.04	0.232
		5.4	-.065	29.16	0.198
		5.6	-.062	31.36	0.162
		5.8	-.057	33.64	0.120
		6.0	-.051	36.00	0.082

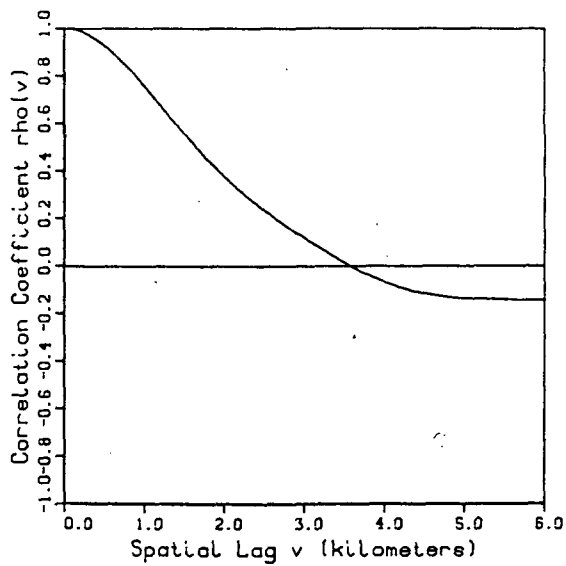
Walnut Gulch, Arizona

Ac=154.21 sq.km.

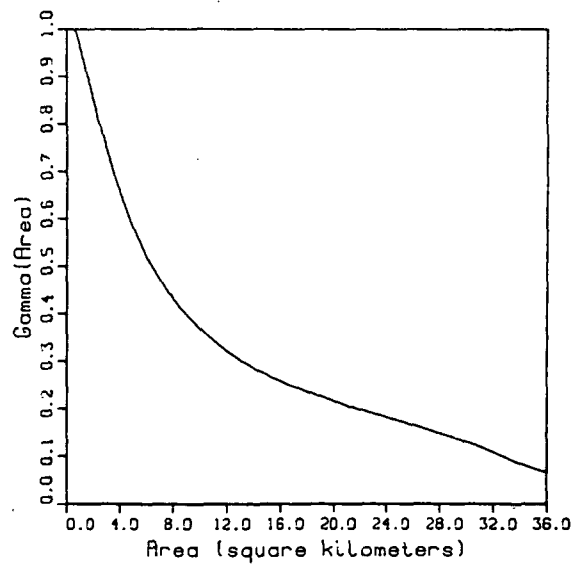
Storm Day
July 26, 1975



Spatial Correlation



Variance Function



Storm Day July 26 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.614$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.386$

Expected Value of Point Depth (mm.): $E(Y) = 0.206$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.303$

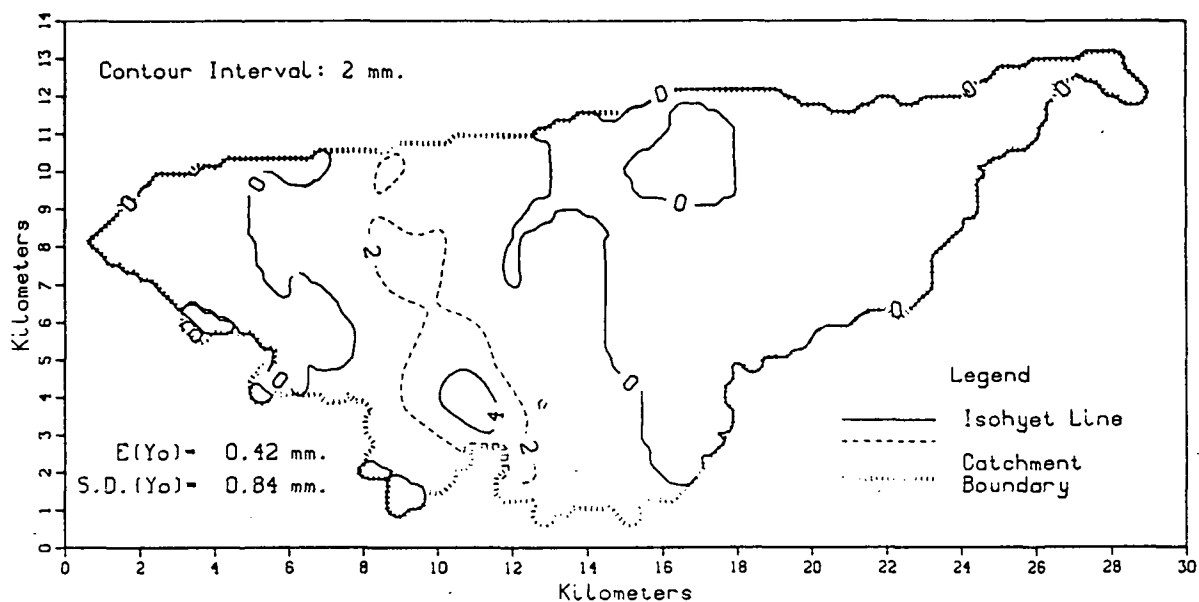
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.605$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.069	0.0	1.000	0.00	1.000
2	0.036	0.2	0.987	0.04	1.019
3	0.007	0.4	0.951	0.16	1.027
4	0.000	0.6	0.898	0.36	1.020
		0.8	0.830	0.64	0.997
		1.0	0.754	1.00	0.961
		1.2	0.674	1.44	0.914
		1.4	0.592	1.96	0.856
		1.6	0.514	2.56	0.790
		1.8	0.441	3.24	0.722
		2.0	0.373	4.00	0.654
		2.2	0.312	4.84	0.590
		2.4	0.258	5.76	0.531
		2.6	0.208	6.76	0.480
		2.8	0.160	7.84	0.436
		3.0	0.115	9.00	0.395
		3.2	0.072	10.24	0.360
		3.4	0.031	11.56	0.329
		3.6	-0.008	12.96	0.301
		3.8	-0.042	14.44	0.277
		4.0	-0.071	16.00	0.256
		4.2	-0.095	17.64	0.238
		4.4	-0.113	19.36	0.220
		4.6	-0.126	21.16	0.204
		4.8	-0.135	23.04	0.189
		5.0	-0.140	25.00	0.173
		5.2	-0.143	27.04	0.155
		5.4	-0.145	29.16	0.136
		5.6	-0.146	31.36	0.115
		5.8	-0.148	33.64	0.087
		6.0	-0.148	36.00	0.066

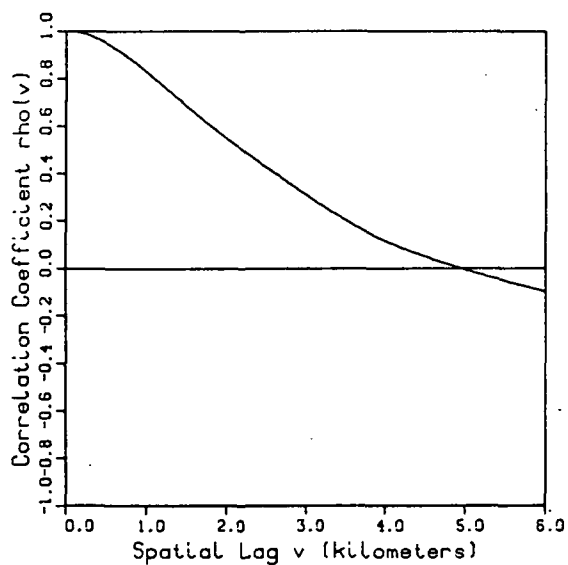
Walnut Gulch, Arizona

Ac=154.21 sq.km.

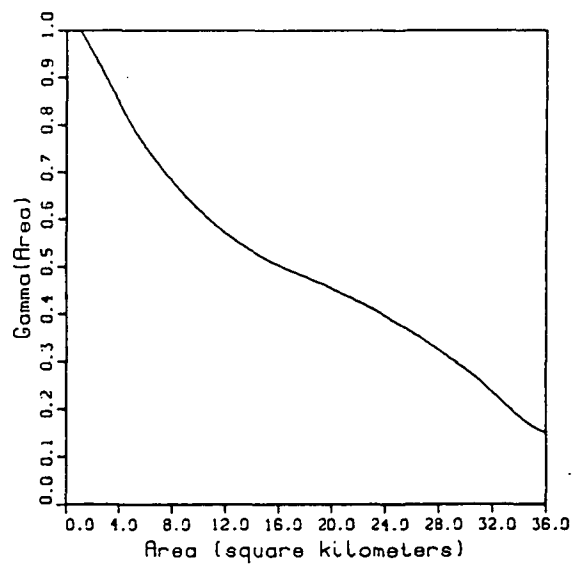
Storm Day
July 27, 1975



Spatial Correlation



Variance Function



Storm Day July 27 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.506$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.494$

Expected Value of Point Depth (mm.): $E(Y) = 0.511$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.787$

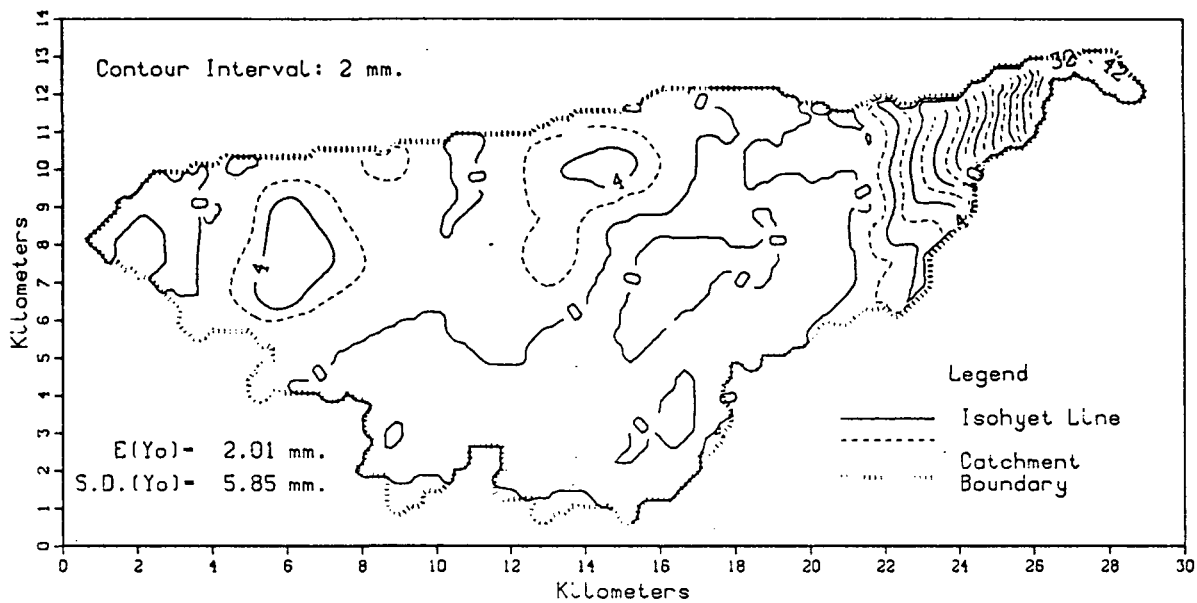
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.118$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.208	0.0	1.000	0.00	1.000
2	0.081	0.2	0.991	0.04	1.017
3	0.026	0.4	0.965	0.16	1.025
4	0.011	0.6	0.927	0.36	1.025
5	0.000	0.8	0.879	0.64	1.016
		1.0	0.825	1.00	1.000
		1.2	0.769	1.44	0.980
		1.4	0.712	1.96	0.954
		1.6	0.655	2.56	0.922
		1.8	0.600	3.24	0.886
		2.0	0.548	4.00	0.846
		2.2	0.498	4.84	0.804
		2.4	0.449	5.76	0.761
		2.6	0.401	6.76	0.722
		2.8	0.353	7.84	0.684
		3.0	0.307	9.00	0.647
		3.2	0.262	10.24	0.612
		3.4	0.219	11.56	0.580
		3.6	0.179	12.96	0.550
		3.8	0.144	14.44	0.524
		4.0	0.112	16.00	0.501
		4.2	0.084	17.64	0.481
		4.4	0.057	19.36	0.461
		4.6	0.033	21.16	0.437
		4.8	0.011	23.04	0.410
		5.0	-0.009	25.00	0.377
		5.2	-0.030	27.04	0.341
		5.4	-0.049	29.16	0.299
		5.6	-0.067	31.36	0.252
		5.8	-0.085	33.64	0.192
		6.0	-0.103	36.00	0.148

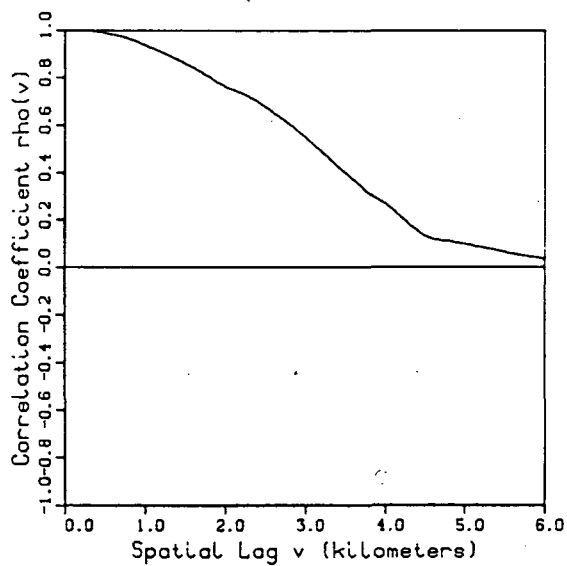
Walnut Gulch, Arizona

Ac=154.21 sq.km.

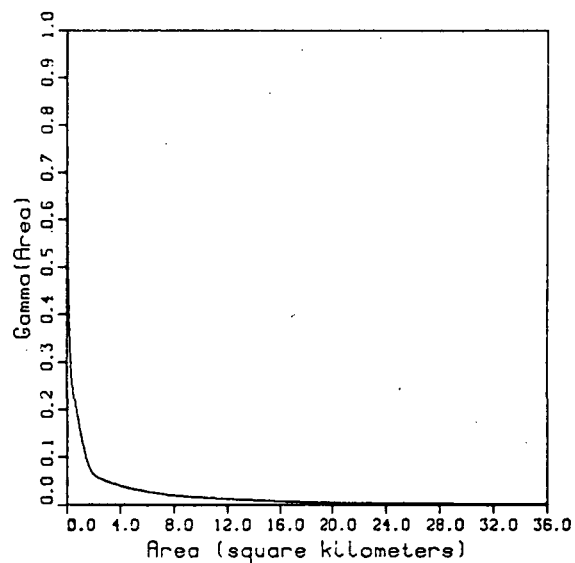
Storm Day
July 28, 1975



Spatial Correlation



Variance Function



Storm Day July 28 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.345$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.655$

Expected Value of Point Depth (mm.): $E(Y) = 2.219$

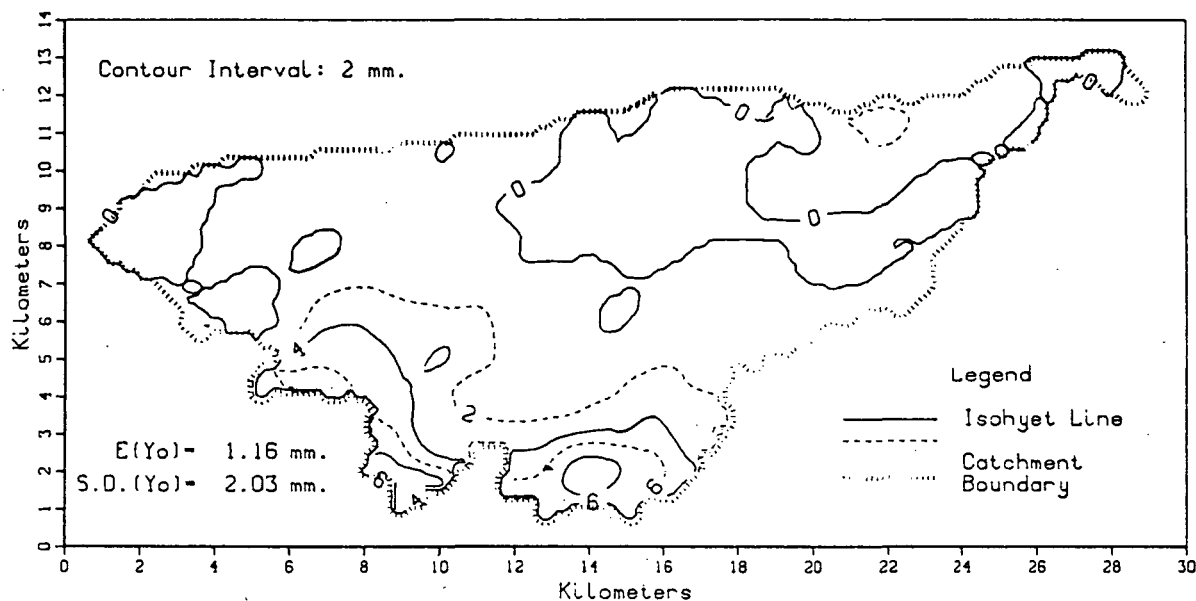
Variance of Point Depth (mm. sq.): $Var(Y) = 44.828$

Coef. of Skewness of Point Depth: $S.C.(Y) = 5.452$

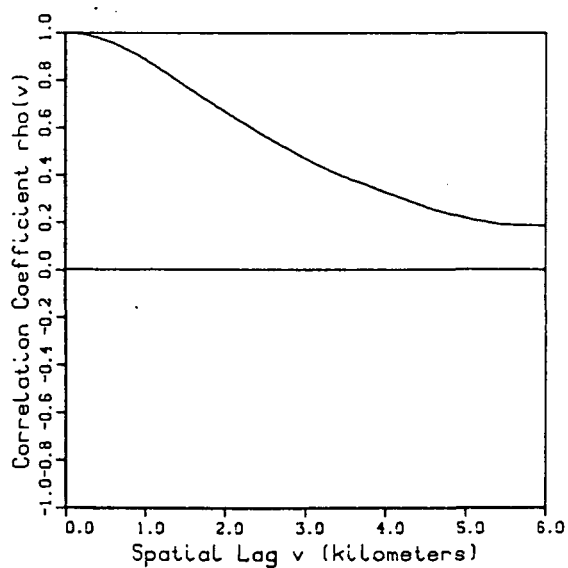
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho(v)		Variance Function A (km.sq.) Gamma(A)	
Acw/Ac ($Y \geq y$)					
1	0.301	0.0	1.000	0.00	1.000
3	0.154	0.2	0.998	0.04	0.701
5	0.080	0.4	0.992	0.16	0.426
7	0.059	0.6	0.980	0.36	0.272
9	0.051	0.8	0.962	0.64	0.210
11	0.044	1.0	0.934	1.00	0.155
13	0.038	1.2	0.904	1.44	0.098
15	0.033	1.4	0.874	1.96	0.064
17	0.030	1.6	0.838	2.56	0.053
19	0.027	1.8	0.800	3.24	0.045
21	0.025	2.0	0.760	4.00	0.039
23	0.022	2.2	0.733	4.84	0.033
25	0.020	2.4	0.697	5.76	0.028
27	0.017	2.6	0.650	6.76	0.023
29	0.015	2.8	0.602	7.84	0.019
31	0.013	3.0	0.546	9.00	0.017
33	0.011	3.2	0.486	10.24	0.014
35	0.009	3.4	0.424	11.56	0.012
37	0.007	3.6	0.367	12.96	0.010
39	0.007	3.8	0.307	14.44	0.008
41	0.007	4.0	0.266	16.00	0.006
43	0.006	4.2	0.211	17.64	0.005
45	0.006	4.4	0.152	19.36	0.004
47	0.006	4.6	0.118	21.16	0.003
49	0.006	4.8	0.109	23.04	0.002
51	0.005	5.0	0.096	25.00	0.002
53	0.004	5.2	0.083	27.04	0.001
55	0.003	5.4	0.070	29.16	0.001
57	0.002	5.6	0.056	31.36	0.001
59	0.001	5.8	0.045	33.64	0.001
61	0.000	6.0	0.033	36.00	0.001
63	0.000				

Walnut Gulch, Arizona
Ac=154.21 sq.km.

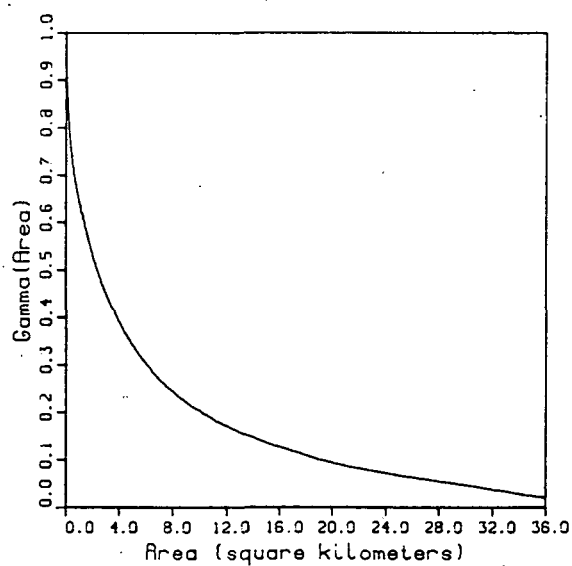
Storm Day
July 29, 1975



Spatial Correlation



Variance Function



Storm Day July 29 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.247$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.753$

Expected Value of Point Depth (mm.): $E(Y) = 1.305$

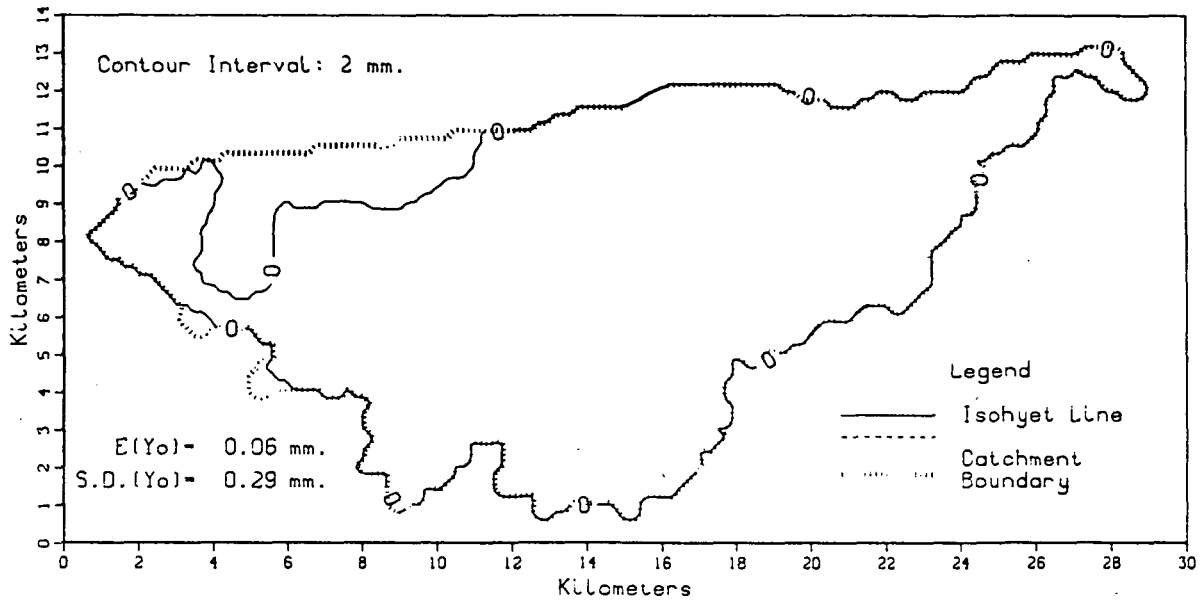
Variance of Point Depth (mm. sq.): $Var(Y) = 4.076$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.948$

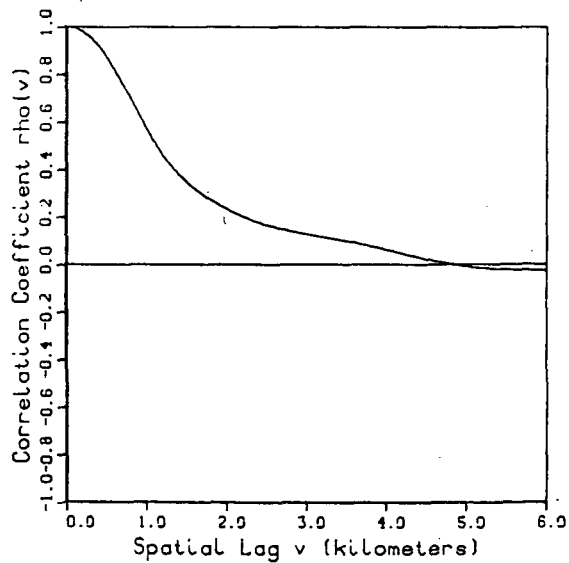
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.319	0.0	1.000	0.00	1.000
2	0.217	0.2	0.994	0.04	0.926
3	0.151	0.4	0.978	0.16	0.847
4	0.104	0.6	0.954	0.36	0.769
5	0.073	0.8	0.922	0.64	0.702
6	0.049	1.0	0.884	1.00	0.646
7	0.026	1.2	0.842	1.44	0.590
8	0.015	1.4	0.796	1.96	0.535
9	0.002	1.6	0.751	2.56	0.483
10	0.000	1.8	0.708	3.24	0.434
		2.0	0.666	4.00	0.388
		2.2	0.624	4.84	0.347
		2.4	0.583	5.76	0.309
		2.6	0.543	6.76	0.275
		2.8	0.506	7.84	0.245
		3.0	0.468	9.00	0.220
		3.2	0.434	10.24	0.197
		3.4	0.403	11.56	0.176
		3.6	0.377	12.96	0.157
		3.8	0.352	14.44	0.140
		4.0	0.325	16.00	0.125
		4.2	0.301	17.64	0.111
		4.4	0.276	19.36	0.097
		4.6	0.252	21.16	0.085
		4.8	0.233	23.04	0.075
		5.0	0.216	25.00	0.066
		5.2	0.203	27.04	0.058
		5.4	0.192	29.16	0.049
		5.6	0.188	31.36	0.040
		5.8	0.187	33.64	0.029
		6.0	0.182	36.00	0.020

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

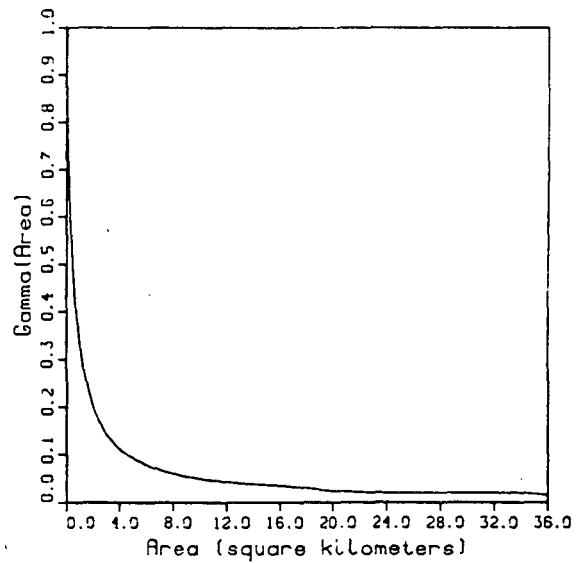
Storm Day
 July 30, 1975



Spatial Correlation



Variance Function



Storm Day July 30 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.901$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.099$

Expected Value of Point Depth (mm.): $E(Y) = 0.032$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.027$

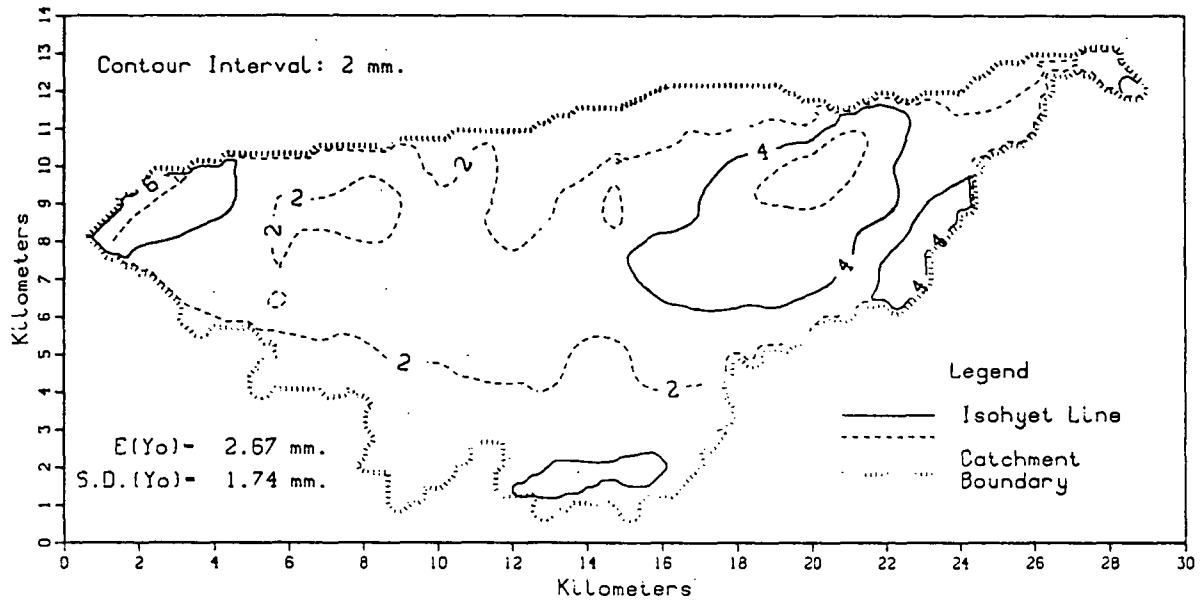
Coef. of Skewness of Point Depth: $S.C.(Y) = 7.682$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	0.008	0.0	1.000	0.00	1.000
2	0.000	0.2	0.980	0.04	0.848
		0.4	0.919	0.16	0.696
		0.6	0.819	0.36	0.552
		0.8	0.694	0.64	0.428
		1.0	0.567	1.00	0.329
		1.2	0.458	1.44	0.255
		1.4	0.375	1.96	0.201
		1.6	0.316	2.56	0.162
		1.8	0.269	3.24	0.133
		2.0	0.231	4.00	0.111
		2.2	0.199	4.84	0.094
		2.4	0.174	5.76	0.080
		2.6	0.153	6.76	0.069
		2.8	0.137	7.84	0.060
		3.0	0.124	9.00	0.053
		3.2	0.113	10.24	0.047
		3.4	0.101	11.56	0.043
		3.6	0.088	12.96	0.040
		3.8	0.074	14.44	0.037
		4.0	0.059	16.00	0.034
		4.2	0.042	17.64	0.030
		4.4	0.026	19.36	0.024
		4.6	0.012	21.16	0.022
		4.8	-0.001	23.04	0.020
		5.0	-0.011	25.00	0.020
		5.2	-0.018	27.04	0.019
		5.4	-0.022	29.16	0.020
		5.6	-0.025	31.36	0.020
		5.8	-0.027	33.64	0.019
		6.0	-0.028	36.00	0.014

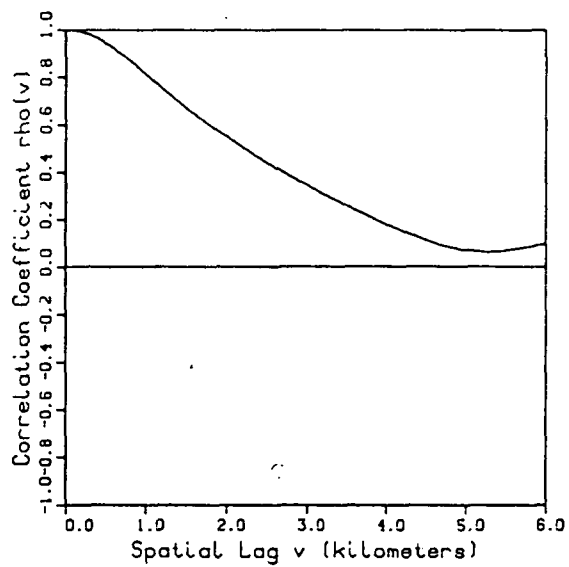
Walnut Gulch, Arizona

Ac=154.21 sq.km.

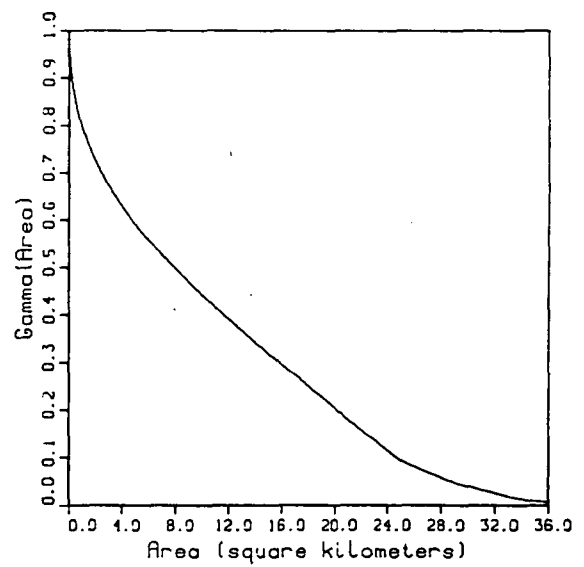
Storm Day
Aug 8, 1975



Spatial Correlation



Variance Function



Storm Day Aug 8 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.011$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.989$

Expected Value of Point Depth (mm.): $E(Y) = 2.734$

Variance of Point Depth (mm. sq.): $Var(Y) = 2.312$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.545$

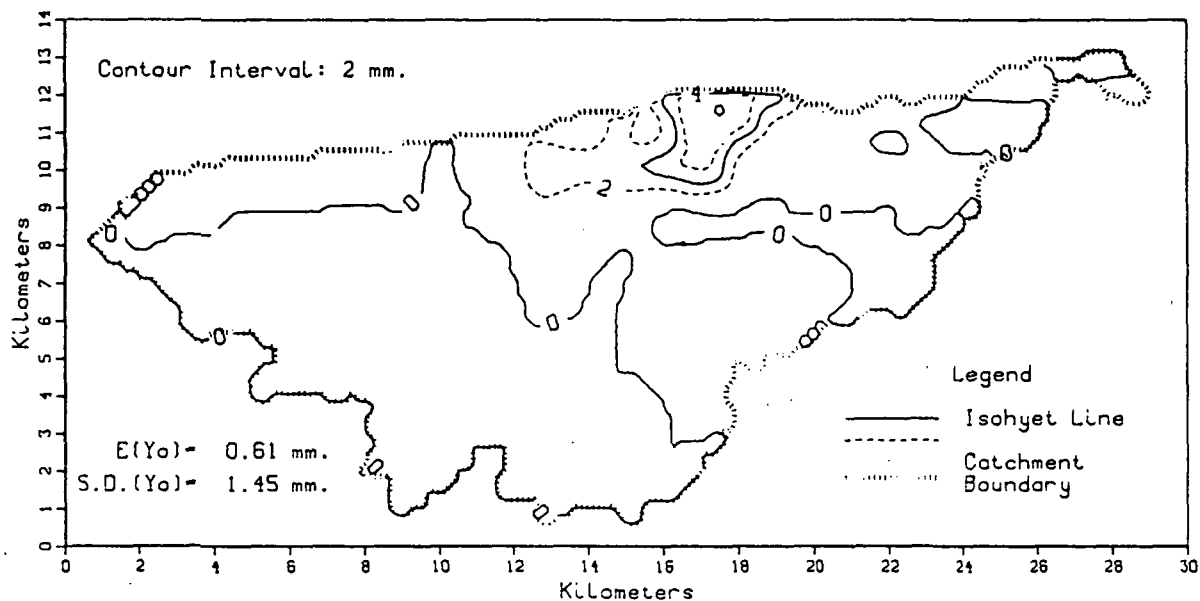
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.895	0.0	1.000	0.00	1.000
2	0.682	0.2	0.990	0.04	0.958
3	0.378	0.4	0.962	0.16	0.915
4	0.200	0.6	0.920	0.36	0.872
5	0.078	0.8	0.868	0.64	0.832
6	0.029	1.0	0.810	1.00	0.796
7	0.009	1.2	0.752	1.44	0.761
8	0.000	1.4	0.695	1.96	0.727
		1.6	0.643	2.56	0.693
		1.8	0.594	3.24	0.660
		2.0	0.548	4.00	0.627
		2.2	0.503	4.84	0.596
		2.4	0.460	5.76	0.563
		2.6	0.419	6.76	0.532
		2.8	0.381	7.84	0.500
		3.0	0.343	9.00	0.468
		3.2	0.308	10.24	0.435
		3.4	0.273	11.56	0.401
		3.6	0.240	12.96	0.366
		3.8	0.209	14.44	0.331
		4.0	0.178	16.00	0.295
		4.2	0.150	17.64	0.258
		4.4	0.124	19.36	0.218
		4.6	0.100	21.16	0.177
		4.8	0.081	23.04	0.136
		5.0	0.069	25.00	0.094
		5.2	0.064	27.04	0.069
		5.4	0.067	29.16	0.045
		5.6	0.076	31.36	0.030
		5.8	0.089	33.64	0.013
		6.0	0.101	36.00	0.007

C-3

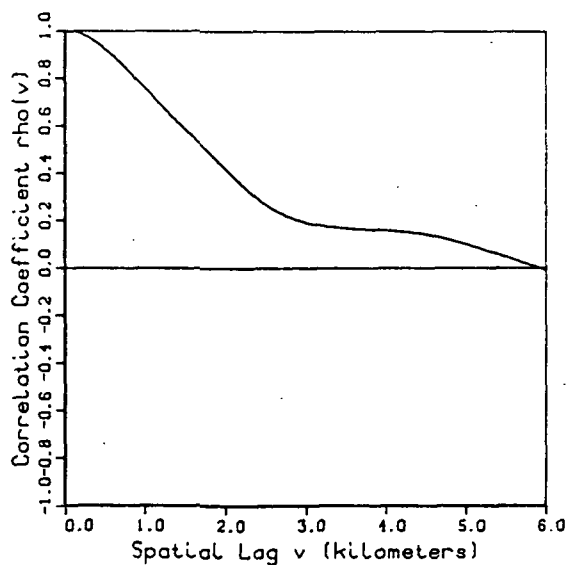
Walnut Gulch, Arizona

Ac=154.21 sq.km.

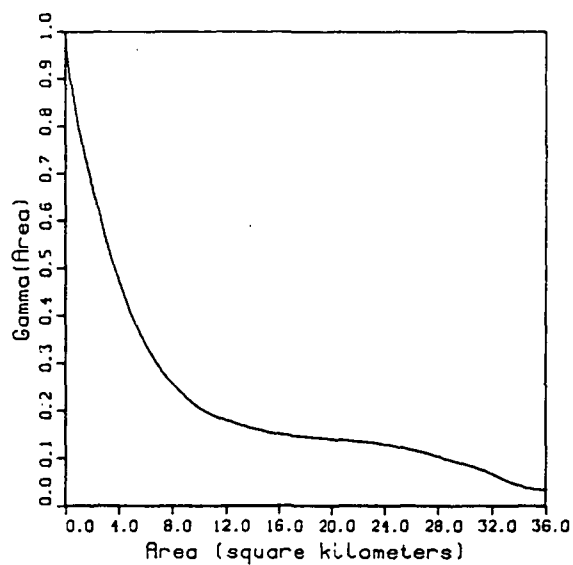
Storm Day
Aug 9, 1975



Spatial Correlation



Variance Function



Storm Day Aug 9 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.481$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.519$

Expected Value of Point Depth (mm.): $E(Y) = 0.487$

Variance of Point Depth (mm. sq.): $Var(Y) = 1.442$

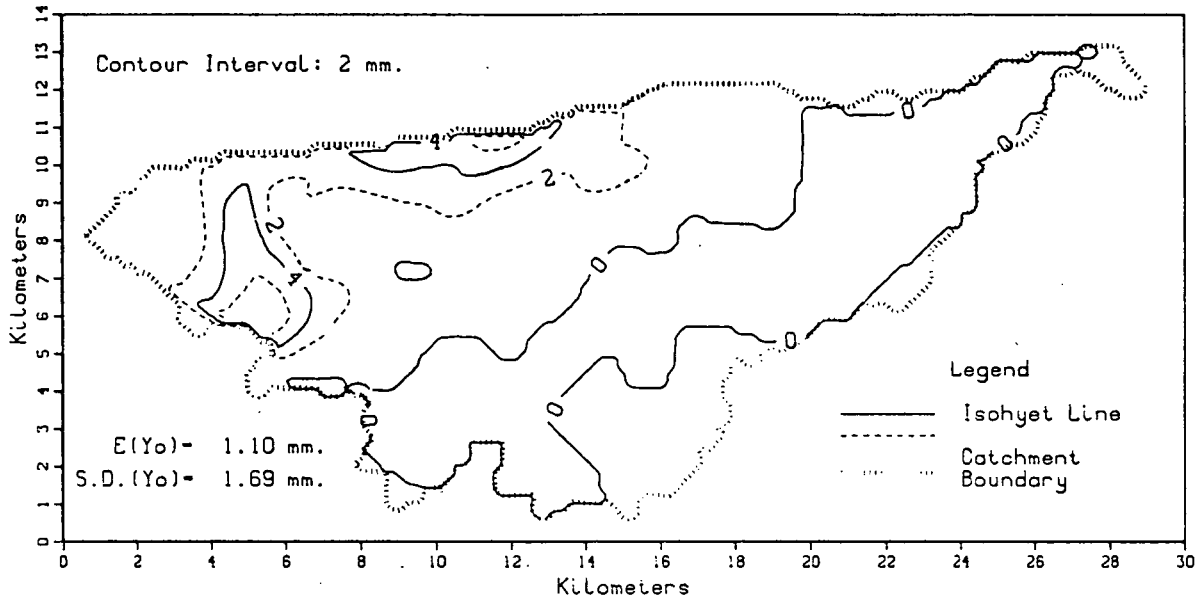
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.962$

Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	$\Gamma(A)$
1	0.123	0.0	1.000	0.00	1.000
2	0.071	0.2	0.986	0.04	0.978
3	0.040	0.4	0.948	0.16	0.948
4	0.030	0.6	0.892	0.36	0.909
5	0.023	0.8	0.827	0.64	0.860
6	0.017	1.0	0.756	1.00	0.805
7	0.010	1.2	0.684	1.44	0.745
8	0.000	1.4	0.615	1.96	0.681
9	0.000	1.6	0.548	2.56	0.612
		1.8	0.482	3.24	0.542
		2.0	0.414	4.00	0.473
		2.2	0.349	4.84	0.409
		2.4	0.291	5.76	0.351
		2.6	0.243	6.76	0.301
		2.8	0.210	7.84	0.260
		3.0	0.188	9.00	0.227
		3.2	0.175	10.24	0.200
		3.4	0.168	11.56	0.183
		3.6	0.163	12.96	0.169
		3.8	0.160	14.44	0.158
		4.0	0.156	16.00	0.149
		4.2	0.151	17.64	0.144
		4.4	0.142	19.36	0.140
		4.6	0.130	21.16	0.136
		4.8	0.114	23.04	0.131
		5.0	0.096	25.00	0.122
		5.2	0.075	27.04	0.109
		5.4	0.054	29.16	0.092
		5.6	0.032	31.36	0.073
		5.8	0.010	33.64	0.045
		6.0	-0.012	36.00	0.033

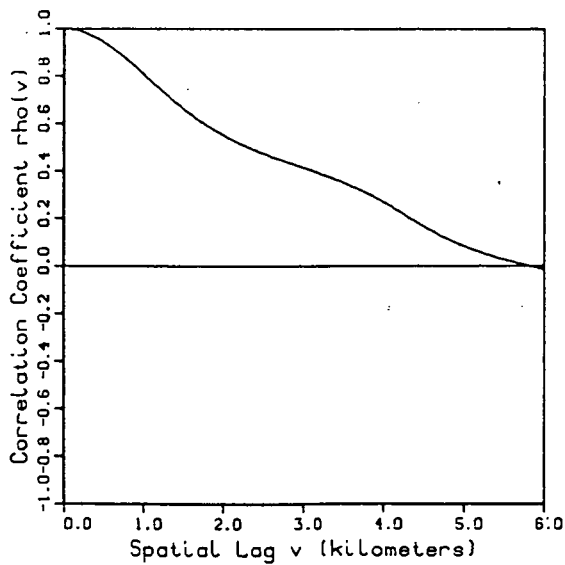
Walnut Gulch, Arizona

Ac=154.21 sq.km.

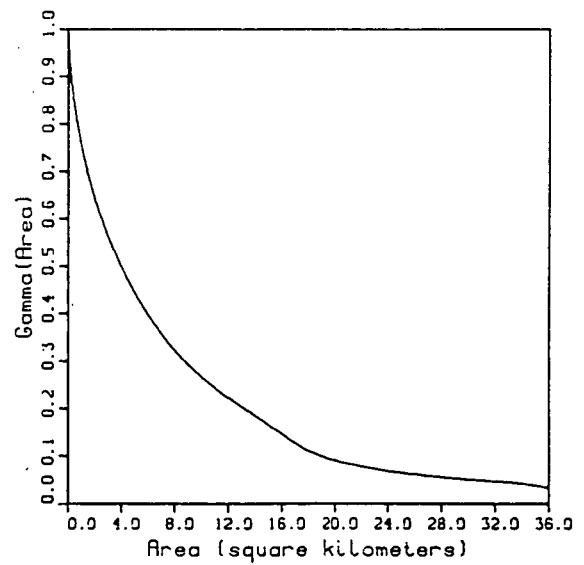
Storm Day
Aug 10, 1975



Spatial Correlation



Variance Function



Storm Day Aug 10 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.343$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.657$

Expected Value of Point Depth (mm.): $E(Y) = 0.897$

Variance of Point Depth (mm. sq.): $Var(Y) = 2.150$

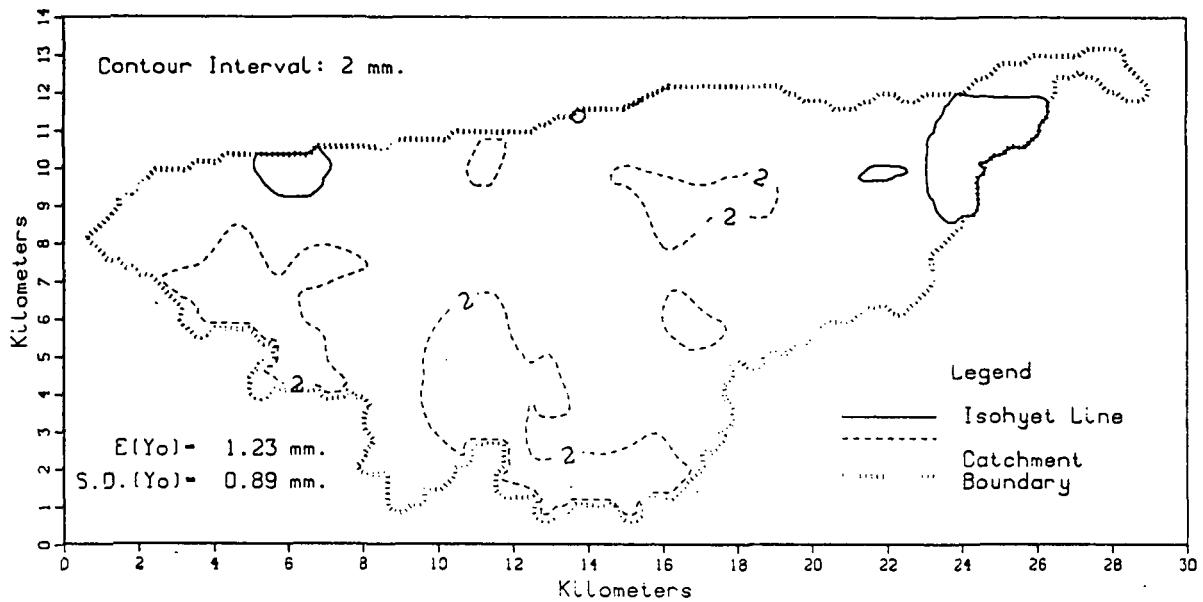
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.055$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho(v)		Variance Function A (km.sq.) Gamma(A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.278	0.0	1.000	0.00	1.000
2	0.168	0.2	0.989	0.04	0.962
3	0.103	0.4	0.960	0.16	0.917
4	0.062	0.6	0.918	0.36	0.864
5	0.033	0.8	0.865	0.64	0.809
6	0.014	1.0	0.806	1.00	0.753
7	0.002	1.2	0.745	1.44	0.699
8	0.000	1.4	0.686	1.96	0.646
		1.6	0.633	2.56	0.594
		1.8	0.588	3.24	0.544
		2.0	0.548	4.00	0.496
		2.2	0.514	4.84	0.449
		2.4	0.485	5.76	0.405
		2.6	0.459	6.76	0.364
		2.8	0.435	7.84	0.325
		3.0	0.411	9.00	0.290
		3.2	0.387	10.24	0.258
		3.4	0.362	11.56	0.229
		3.6	0.334	12.96	0.202
		3.8	0.302	14.44	0.174
		4.0	0.266	16.00	0.144
		4.2	0.225	17.64	0.114
		4.4	0.182	19.36	0.094
		4.6	0.144	21.16	0.082
		4.8	0.109	23.04	0.071
		5.0	0.081	25.00	0.063
		5.2	0.055	27.04	0.057
		5.4	0.032	29.16	0.051
		5.6	0.014	31.36	0.046
		5.8	-.002	33.64	0.041
		6.0	-.017	36.00	0.032

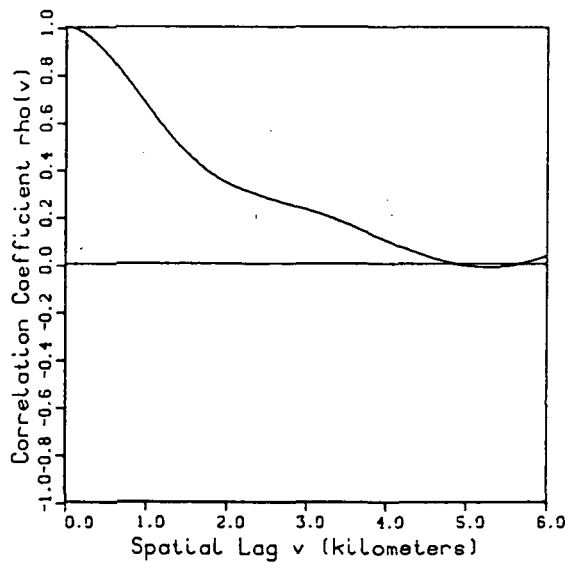
Walnut Gulch, Arizona

Ac=154.21 sq.km.

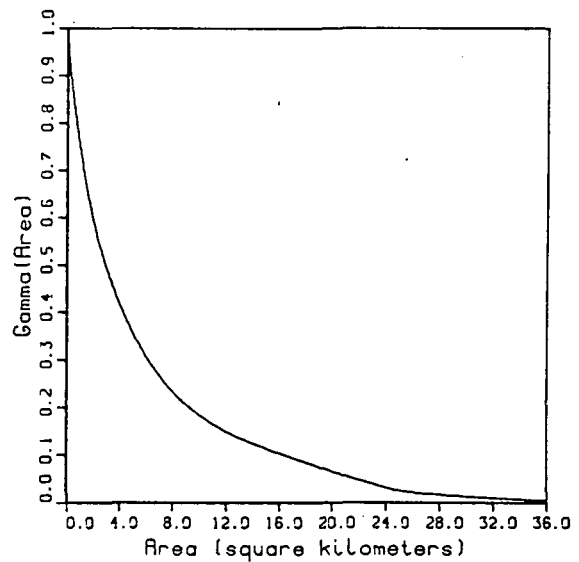
Storm Day
Aug 11, 1975



Spatial Correlation



Variance Function



Storm Day Aug 11 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.042$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.958$

Expected Value of Point Depth (mm.): $E(Y) = 1.326$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.661$

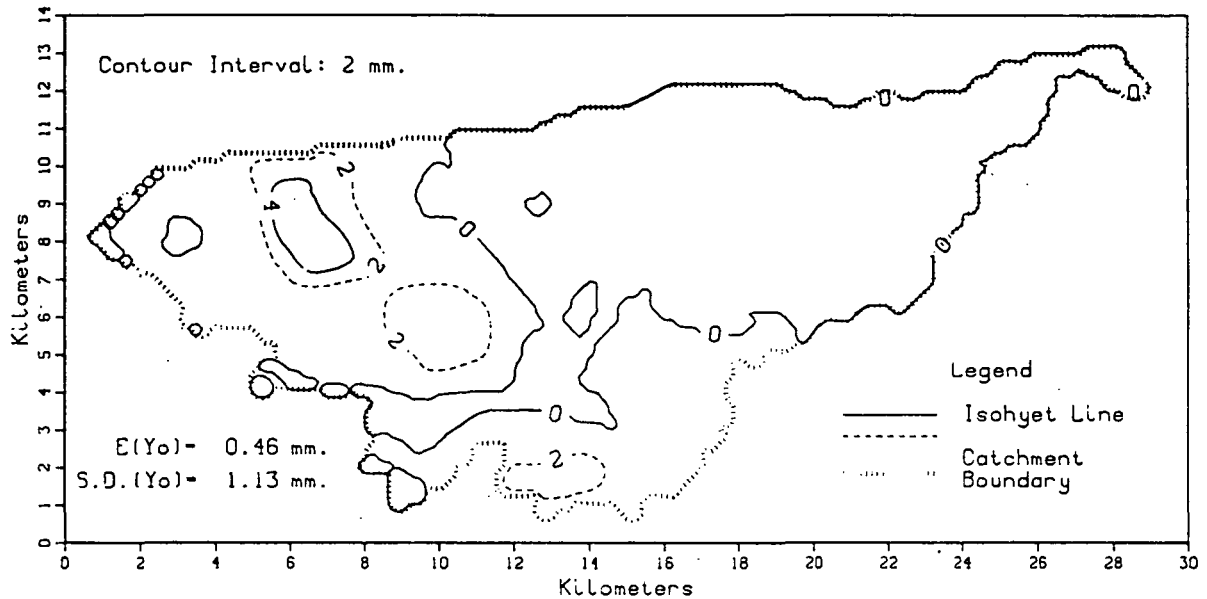
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.249$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
Acw/Ac (Y≥y)					
1	0.623	0.0	1.000	0.00	1.000
2	0.214	0.2	0.979	0.04	0.974
3	0.025	0.4	0.925	0.16	0.935
4	0.000	0.6	0.849	0.36	0.882
		0.8	0.761	0.64	0.819
		1.0	0.669	1.00	0.749
		1.2	0.581	1.44	0.674
		1.4	0.501	1.96	0.601
		1.6	0.434	2.56	0.534
		1.8	0.381	3.24	0.473
		2.0	0.341	4.00	0.417
		2.2	0.311	4.84	0.365
		2.4	0.287	5.76	0.318
		2.6	0.266	6.76	0.275
		2.8	0.246	7.84	0.237
		3.0	0.227	9.00	0.206
		3.2	0.206	10.24	0.179
		3.4	0.182	11.56	0.155
		3.6	0.154	12.96	0.136
		3.8	0.125	14.44	0.118
		4.0	0.097	16.00	0.102
		4.2	0.069	17.64	0.087
		4.4	0.044	19.36	0.070
		4.6	0.021	21.16	0.054
		4.8	0.003	23.04	0.038
		5.0	-0.009	25.00	0.024
		5.2	-0.014	27.04	0.018
		5.4	-0.012	29.16	0.013
		5.6	-0.002	31.36	0.010
		5.8	0.014	33.64	0.006
		6.0	0.036	36.00	0.004

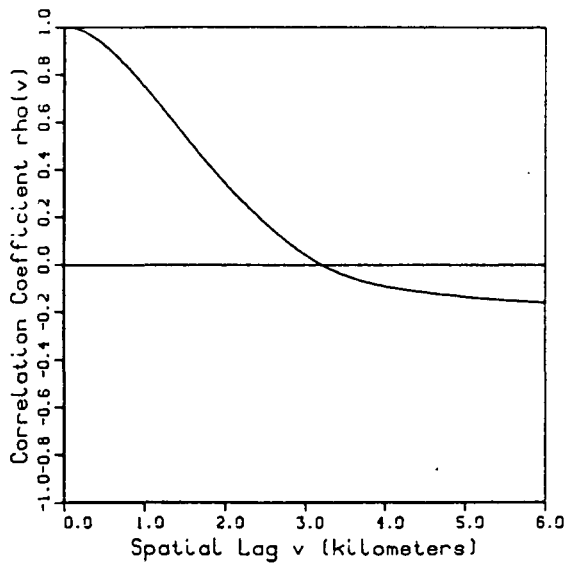
Walnut Gulch, Arizona

$A_c = 154.21 \text{ sq. km.}$

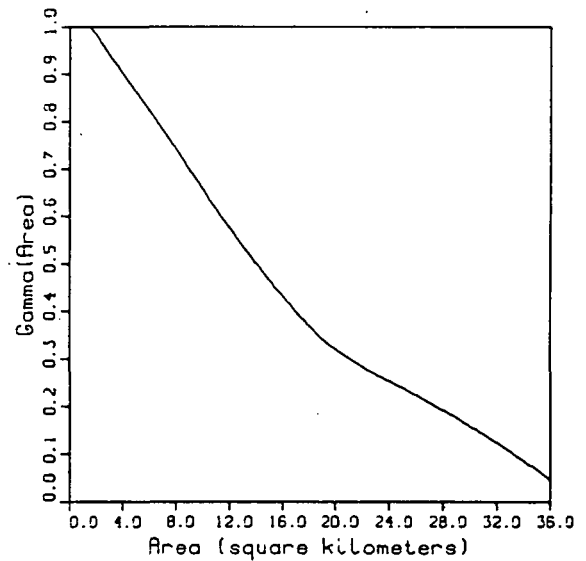
Storm Day
Aug 12, 1975



Spatial Correlation



Variance Function



Storm Day Aug 12 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.508$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.492$

Expected Value of Point Depth (mm.): $E(Y) = 0.529$

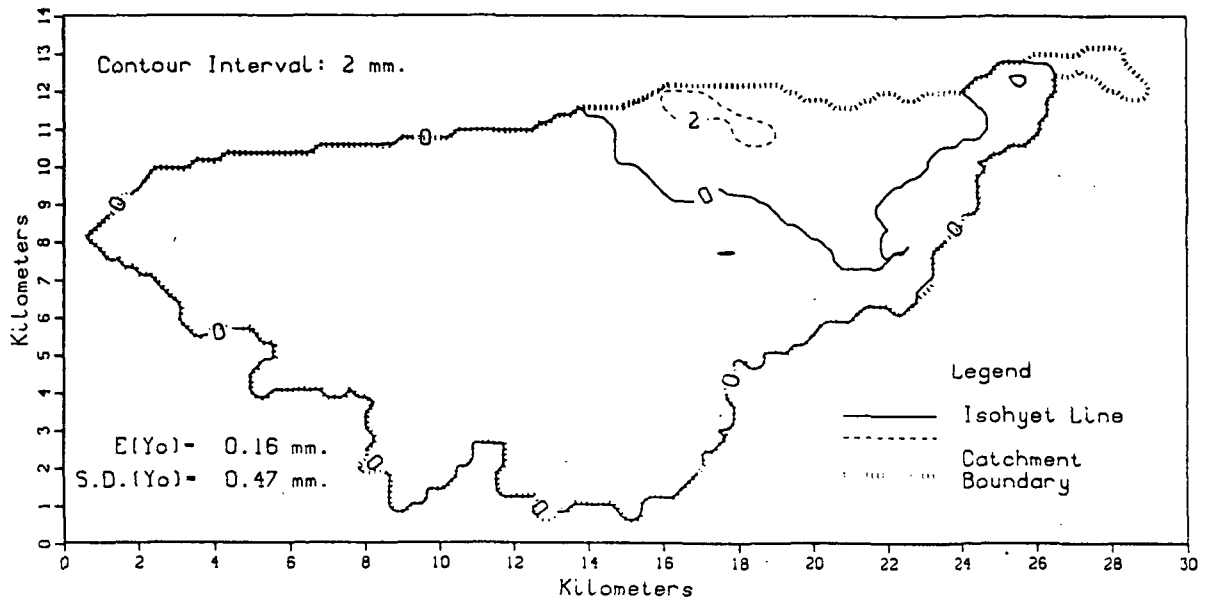
Variance of Point Depth (mm. sq.): $Var(Y) = 1.073$

Coef. of Skewness of Point Depth: $S.C.(Y) = 2.504$

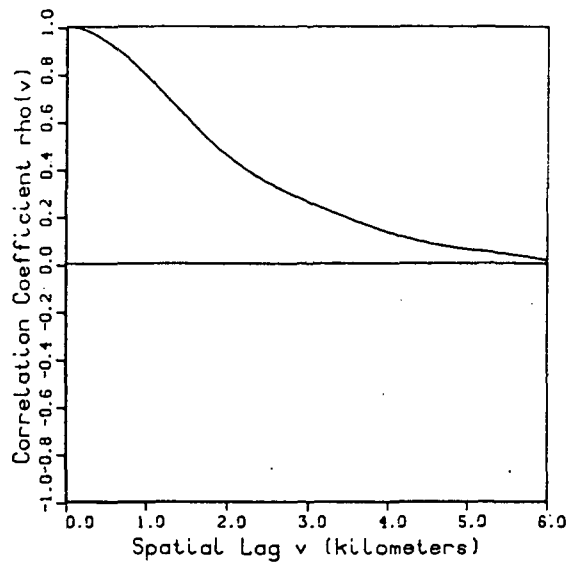
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.176	0.0	1.000	0.00	1.000
2	0.104	0.2	0.987	0.04	1.025
3	0.050	0.4	0.949	0.16	1.040
4	0.021	0.6	0.894	0.36	1.043
5	0.008	0.8	0.824	0.64	1.036
6	0.000	1.0	0.746	1.00	1.023
		1.2	0.663	1.44	1.006
		1.4	0.578	1.96	0.984
		1.6	0.494	2.56	0.958
		1.8	0.415	3.24	0.930
		2.0	0.339	4.00	0.900
		2.2	0.269	4.84	0.867
		2.4	0.203	5.76	0.831
		2.6	0.142	6.76	0.791
		2.8	0.087	7.84	0.746
		3.0	0.039	9.00	0.697
		3.2	-0.002	10.24	0.645
		3.4	-0.035	11.56	0.592
		3.6	-0.061	12.96	0.538
		3.8	-0.080	14.44	0.485
		4.0	-0.095	16.00	0.432
		4.2	-0.107	17.64	0.379
		4.4	-0.116	19.36	0.333
		4.6	-0.125	21.16	0.298
		4.8	-0.132	23.04	0.265
		5.0	-0.139	25.00	0.237
		5.2	-0.146	27.04	0.206
		5.4	-0.152	29.16	0.172
		5.6	-0.156	31.36	0.134
		5.8	-0.160	33.64	0.091
		6.0	-0.164	36.00	0.045

Walnut Gulch, Arizona
Ac=154.21 sq.km.

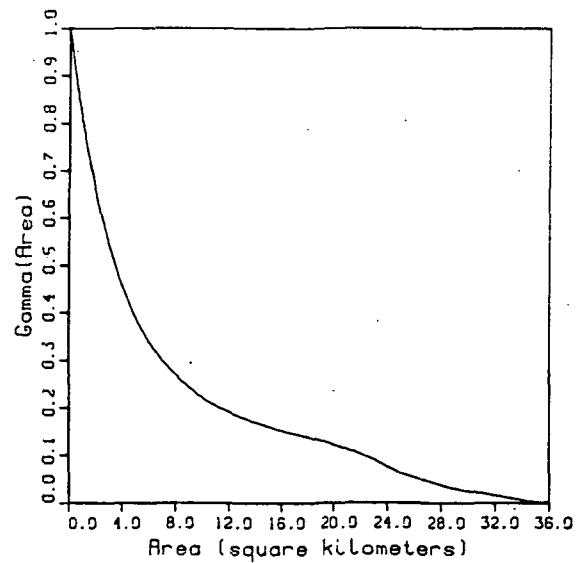
Storm Day
Aug 13, 1975



Spatial Correlation



Variance Function



Storm Day Aug 13 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c) = 0.810$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c) = 0.190$

Expected Value of Point Depth (mm.): $E(Y) = 0.119$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.143$

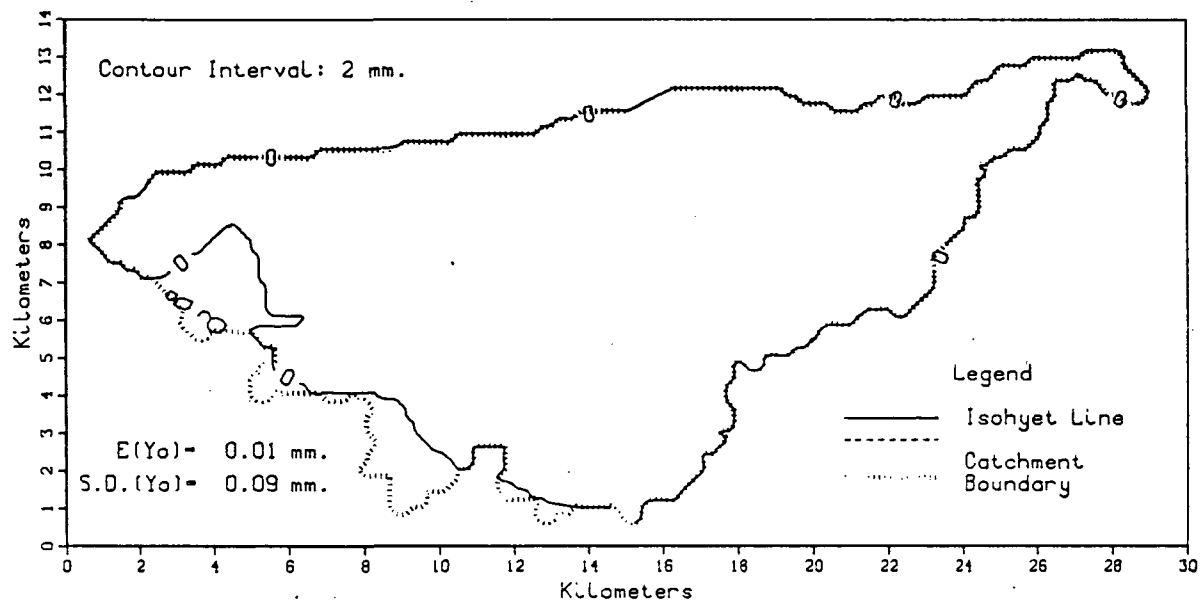
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.917$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.042	0.0	1.000	0.00	1.000
2	0.012	0.2	0.988	0.04	0.997
3	0.000	0.4	0.956	0.16	0.974
		0.6	0.911	0.36	0.932
		0.8	0.854	0.64	0.874
		1.0	0.789	1.00	0.807
		1.2	0.719	1.44	0.736
		1.4	0.647	1.96	0.663
		1.6	0.577	2.56	0.590
		1.8	0.511	3.24	0.520
		2.0	0.453	4.00	0.456
		2.2	0.402	4.84	0.399
		2.4	0.360	5.76	0.350
		2.6	0.323	6.76	0.308
		2.8	0.290	7.84	0.273
		3.0	0.259	9.00	0.242
		3.2	0.231	10.24	0.215
		3.4	0.203	11.56	0.196
		3.6	0.176	12.96	0.179
		3.8	0.152	14.44	0.164
		4.0	0.130	16.00	0.150
		4.2	0.110	17.64	0.139
		4.4	0.093	19.36	0.126
		4.6	0.079	21.16	0.110
		4.8	0.068	23.04	0.089
		5.0	0.058	25.00	0.061
		5.2	0.050	27.04	0.044
		5.4	0.042	29.16	0.028
		5.6	0.034	31.36	0.018
		5.8	0.024	33.64	0.006
		6.0	0.014	36.00	0.000

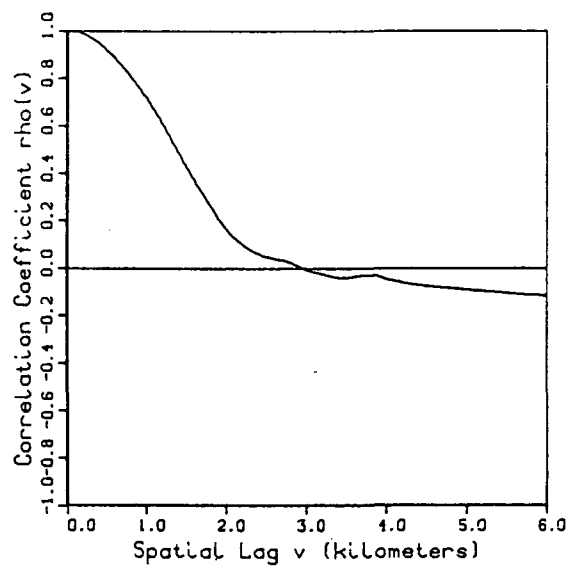
Walnut Gulch, Arizona

Ac=154.21 sq.km.

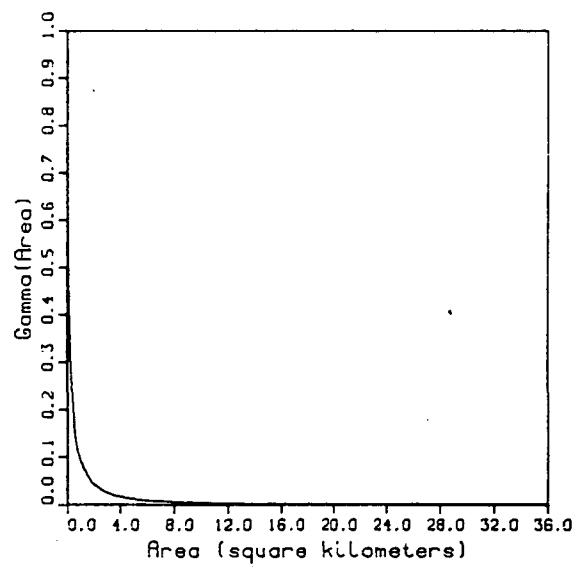
Storm Day
Aug 18, 1975



Spatial Correlation



Variance Function



Storm Day Aug 18 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.932$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.068$

Expected Value of Point Depth (mm.): $E(Y) = 0.017$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.010$

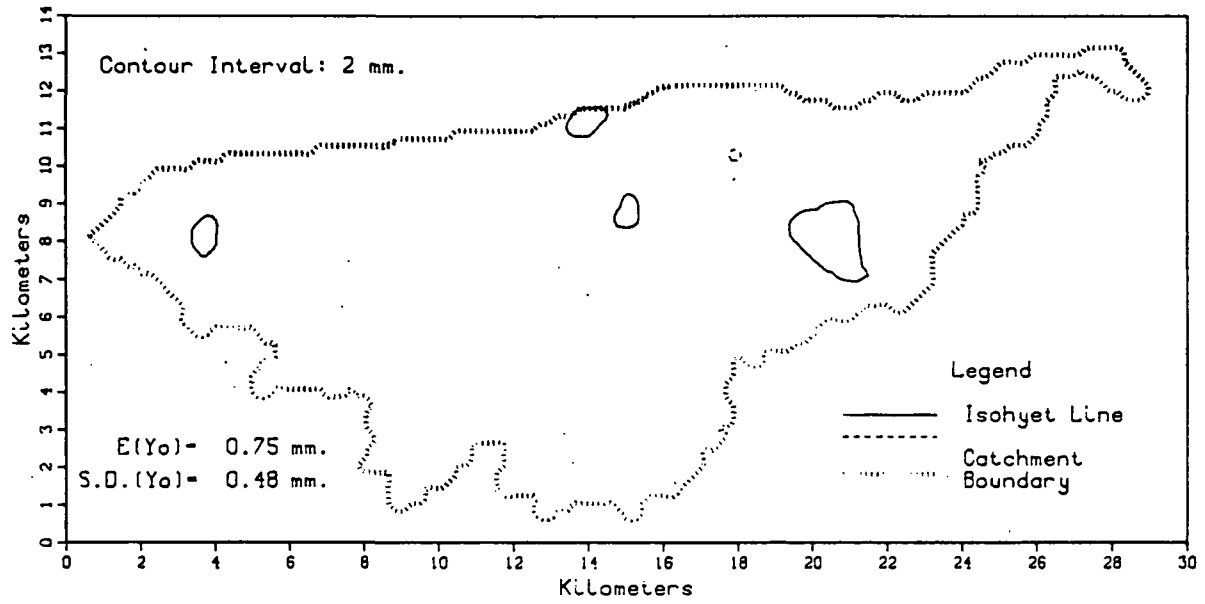
Coef. of Skewness of Point Depth: $S.C.(Y) = 8.595$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.001	0.0	1.000	0.00	1.000
2	0.000	0.2	0.986	0.04	0.664
		0.4	0.946	0.16	0.406
		0.6	0.887	0.36	0.246
		0.8	0.806	0.64	0.137
		1.0	0.716	1.00	0.095
		1.2	0.610	1.44	0.065
		1.4	0.489	1.96	0.043
		1.6	0.370	2.56	0.030
		1.8	0.264	3.24	0.021
		2.0	0.163	4.00	0.015
		2.2	0.100	4.84	0.011
		2.4	0.057	5.76	0.008
		2.6	0.037	6.76	0.006
		2.8	0.022	7.84	0.005
		3.0	-.011	9.00	0.004
		3.2	-.030	10.24	0.003
		3.4	-.044	11.56	0.002
		3.6	-.037	12.96	0.001
		3.8	-.031	14.44	0.001
		4.0	-.050	16.00	0.000
		4.2	-.065	17.64	0.000
		4.4	-.077	19.36	0.000
		4.6	-.084	21.16	0.000
		4.8	-.090	23.04	0.000
		5.0	-.095	25.00	0.000
		5.2	-.101	27.04	0.000
		5.4	-.107	29.16	0.000
		5.6	-.113	31.36	0.000
		5.8	-.118	33.64	0.000
		6.0	-.120	36.00	0.000

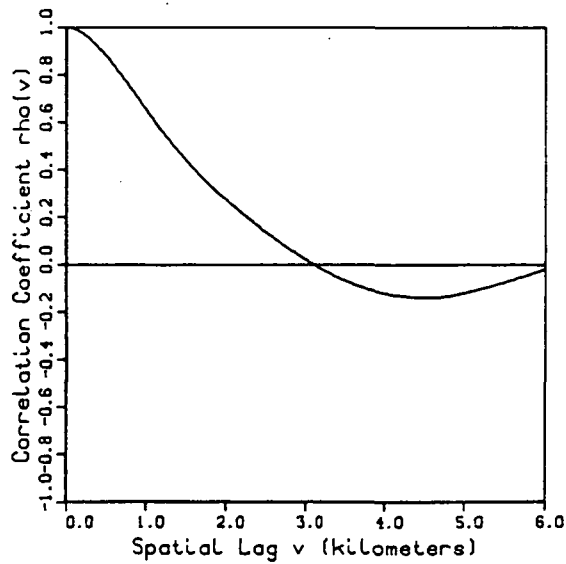
Walnut Gulch, Arizona

Ac=154.21 sq.km.

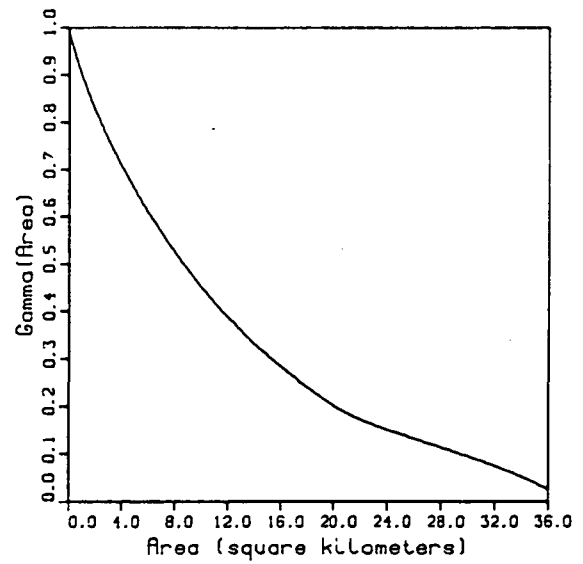
Storm Day
Aug 19, 1975



Spatial Correlation



Variance Function



Storm Day Aug 19 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.021$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.979$

Expected Value of Point Depth (mm.): $E(Y) = 0.794$

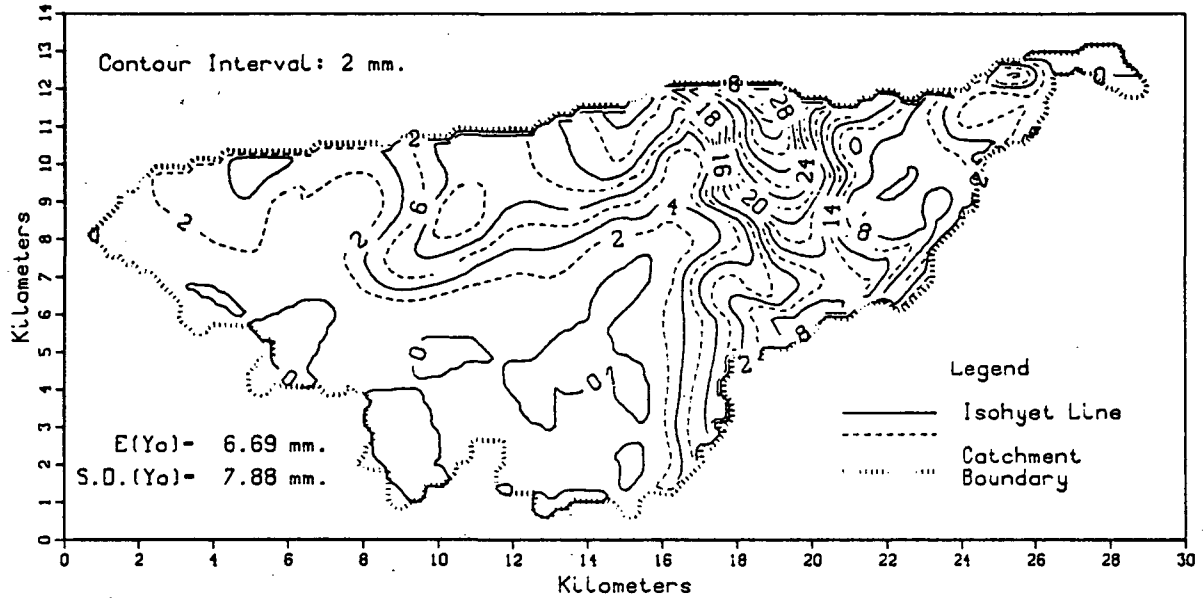
Variance of Point Depth (mm. sq.): $Var(Y) = 0.174$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.250$

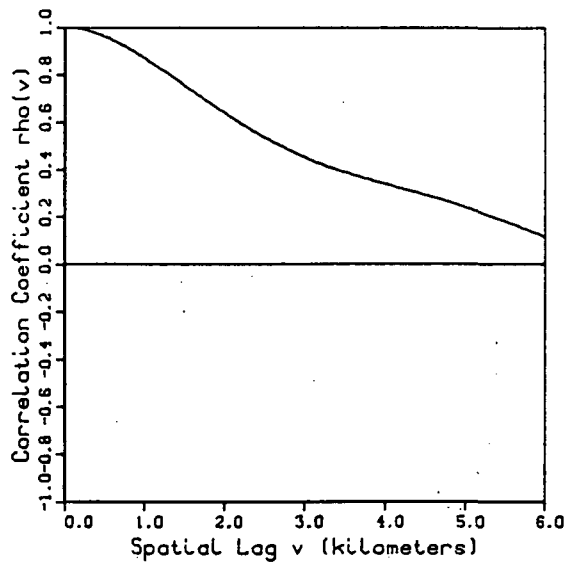
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.315	0.0	1.000	0.00	1.000
2	0.001	0.2	0.975	0.04	0.991
3	0.000	0.4	0.915	0.16	0.976
		0.6	0.835	0.36	0.956
		0.8	0.745	0.64	0.929
		1.0	0.651	1.00	0.899
		1.2	0.560	1.44	0.865
		1.4	0.475	1.96	0.828
		1.6	0.400	2.56	0.789
		1.8	0.331	3.24	0.748
		2.0	0.270	4.00	0.706
		2.2	0.212	4.84	0.663
		2.4	0.158	5.76	0.619
		2.6	0.107	6.76	0.574
		2.8	0.060	7.84	0.529
		3.0	0.016	9.00	0.485
		3.2	-.024	10.24	0.442
		3.4	-.058	11.56	0.400
		3.6	-.087	12.96	0.358
		3.8	-.110	14.44	0.319
		4.0	-.127	16.00	0.282
		4.2	-.137	17.64	0.245
		4.4	-.142	19.36	0.211
		4.6	-.141	21.16	0.182
		4.8	-.133	23.04	0.158
		5.0	-.120	25.00	0.140
		5.2	-.103	27.04	0.121
		5.4	-.084	29.16	0.101
		5.6	-.064	31.36	0.080
		5.8	-.043	33.64	0.055
		6.0	-.019	36.00	0.024

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq. km.}$

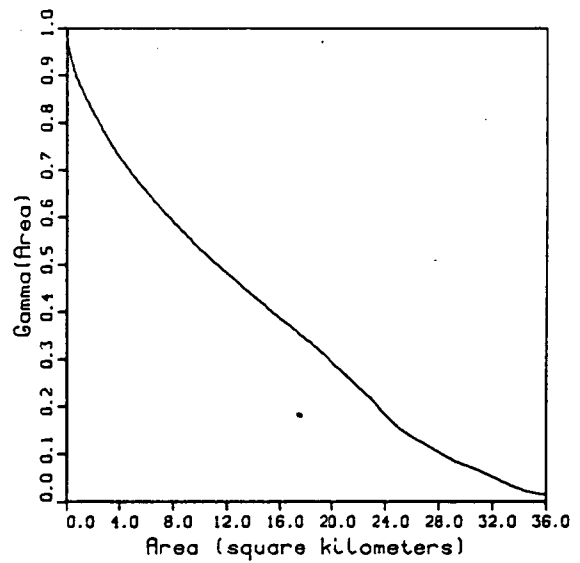
Storm Day
 Aug 22, 1975



Spatial Correlation



Variance Function



Storm Day Aug 22 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.091$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.909$

Expected Value of Point Depth (mm.): $E(Y) = 5.665$

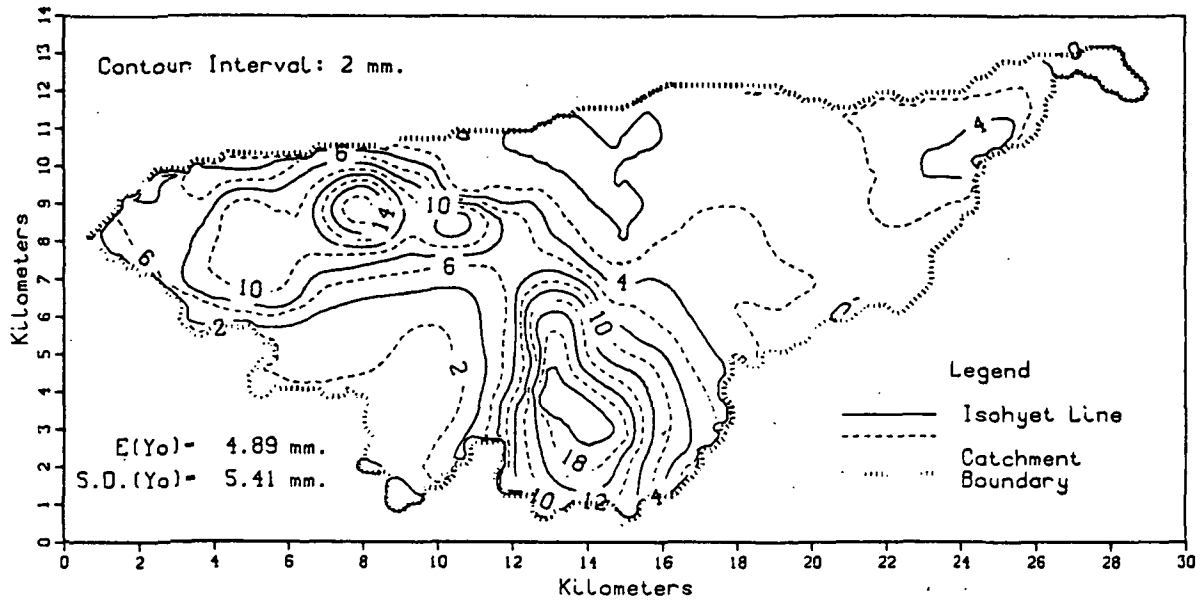
Variance of Point Depth (mm. sq.): $Var(Y) = 47.204$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.797$

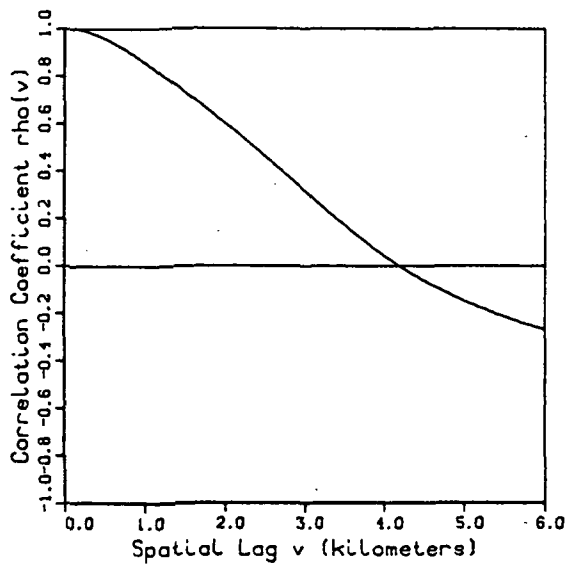
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.660	0.0	1.000	0.00	1.000
3	0.504	0.2	0.993	0.04	0.976
5	0.415	0.4	0.973	0.16	0.954
7	0.343	0.6	0.944	0.36	0.930
9	0.241	0.8	0.908	0.64	0.905
11	0.171	1.0	0.867	1.00	0.879
13	0.128	1.2	0.822	1.44	0.852
15	0.089	1.4	0.776	1.96	0.823
17	0.063	1.6	0.729	2.56	0.792
19	0.052	1.8	0.682	3.24	0.759
21	0.043	2.0	0.637	4.00	0.725
23	0.036	2.2	0.594	4.84	0.692
25	0.028	2.4	0.553	5.76	0.659
27	0.021	2.6	0.516	6.76	0.626
29	0.015	2.8	0.481	7.84	0.592
31	0.010	3.0	0.449	9.00	0.558
33	0.006	3.2	0.421	10.24	0.524
35	0.004	3.4	0.396	11.56	0.491
37	0.002	3.6	0.375	12.96	0.456
39	0.001	3.8	0.355	14.44	0.421
41	0.001	4.0	0.336	16.00	0.384
		4.4	0.299	19.36	0.307
		4.6	0.280	21.16	0.261
		4.8	0.260	23.04	0.211
		5.0	0.238	25.00	0.153
		5.2	0.213	27.04	0.118
		5.4	0.190	29.16	0.083
		5.6	0.165	31.36	0.059
		5.8	0.140	33.64	0.029
		6.0	0.113	36.00	0.014

Walnut Gulch, Arizona
 $A_c = 154.21$ sq.km.

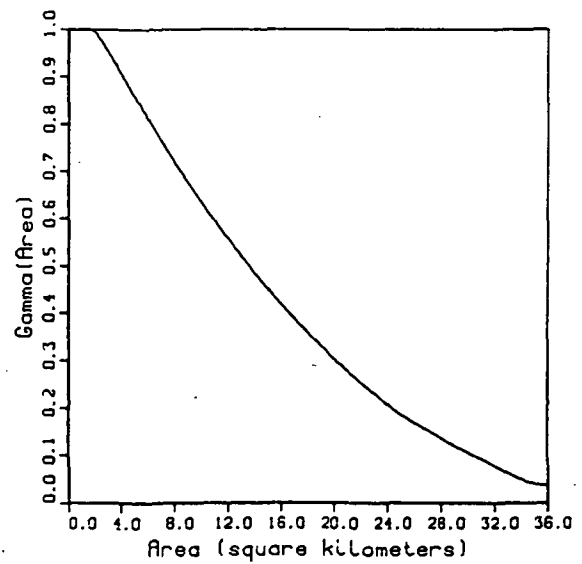
Storm Day
 Aug 23, 1975



Spatial Correlation



Variance Function



Storm Day Aug 23 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.036$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.964$

Expected Value of Point Depth (mm.): $E(Y) = 5.399$

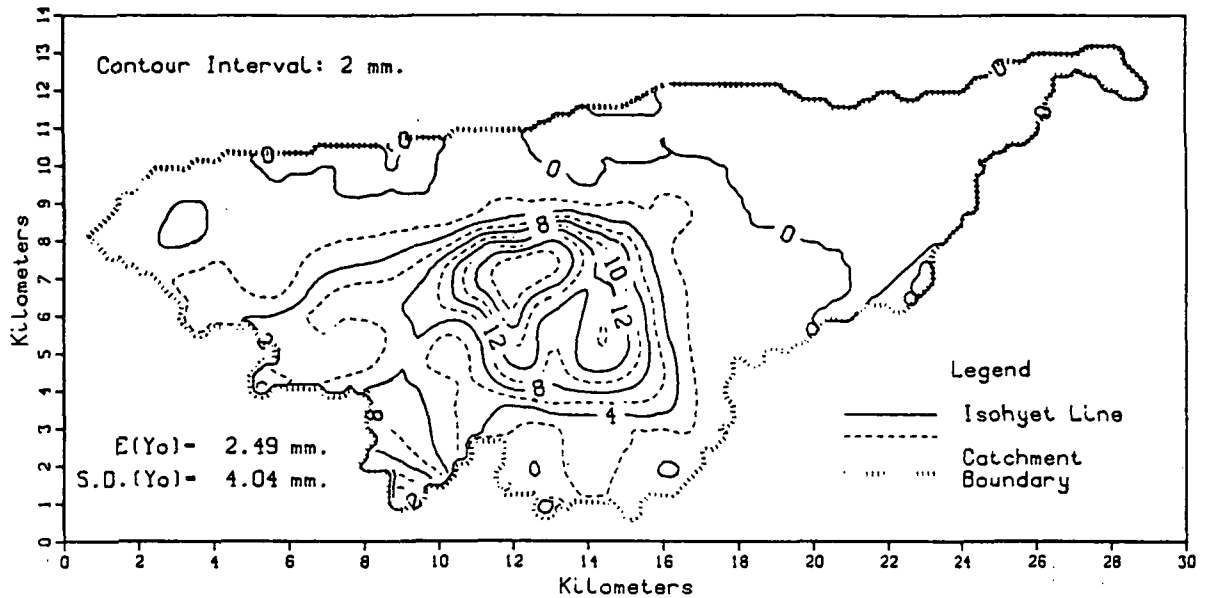
Variance of Point Depth (mm. sq.): $Var(Y) = 26.373$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.147$

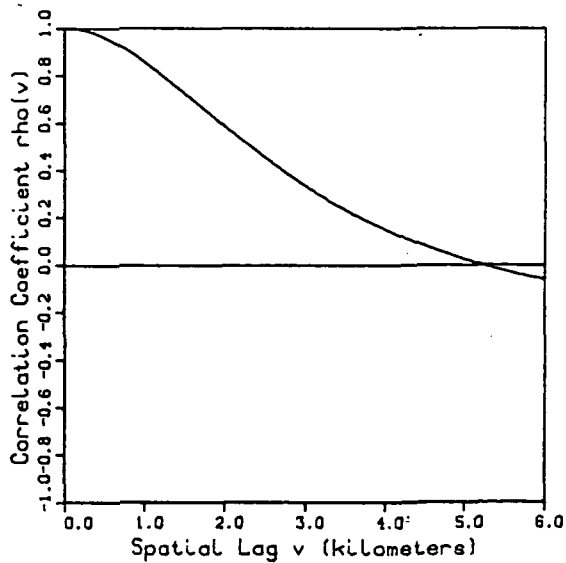
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
Acw/Ac ($Y \geq y$)					
1	0.818	0.0	1.000	0.00	1.000
2	0.666	0.2	0.992	0.04	1.013
3	0.553	0.4	0.971	0.16	1.022
4	0.463	0.6	0.938	0.36	1.026
5	0.409	0.8	0.898	0.64	1.026
6	0.361	1.0	0.852	1.00	1.021
7	0.314	1.2	0.804	1.44	1.011
8	0.266	1.4	0.753	1.96	0.995
9	0.229	1.6	0.700	2.56	0.970
10	0.196	1.8	0.647	3.24	0.940
11	0.155	2.0	0.594	4.00	0.905
12	0.122	2.2	0.540	4.84	0.865
13	0.103	2.4	0.485	5.76	0.821
14	0.089	2.6	0.428	6.76	0.773
15	0.074	2.8	0.370	7.84	0.724
16	0.060	3.0	0.312	9.00	0.674
17	0.046	3.2	0.253	10.24	0.624
18	0.034	3.4	0.195	11.56	0.572
19	0.021	3.6	0.139	12.96	0.520
20	0.012	3.8	0.086	14.44	0.469
21	0.005	4.0	0.038	16.00	0.418
22	0.000	4.2	-.007	17.64	0.368
		4.4	-.049	19.36	0.319
		4.6	-.086	21.16	0.273
		4.8	-.121	23.04	0.229
		5.0	-.153	25.00	0.185
		5.2	-.182	27.04	0.151
		5.4	-.209	29.16	0.117
		5.6	-.232	31.36	0.087
		5.8	-.254	33.64	0.053
		6.0	-.273	36.00	0.036

Walnut Gulch, Arizona
Ac=154.21 sq.km.

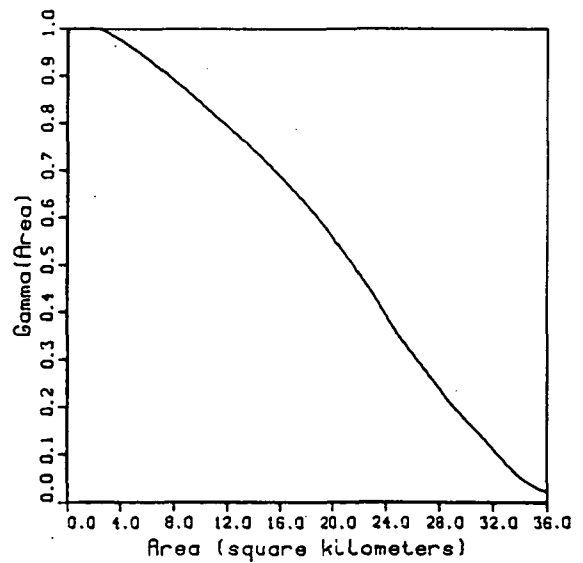
Storm Day
Sept 1, 1975



Spatial Correlation



Variance Function



Storm Day Sept 1 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.254$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.746$

Expected Value of Point Depth (mm.): $E(Y) = 3.344$

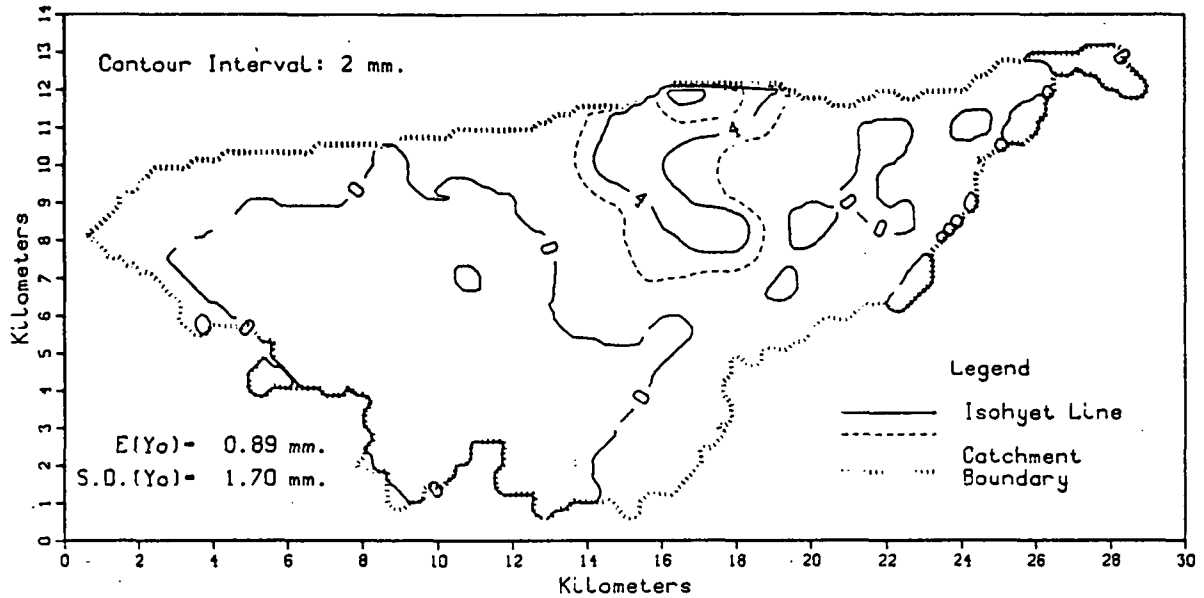
Variance of Point Depth (mm. sq.): $Var(Y) = 20.181$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.495$

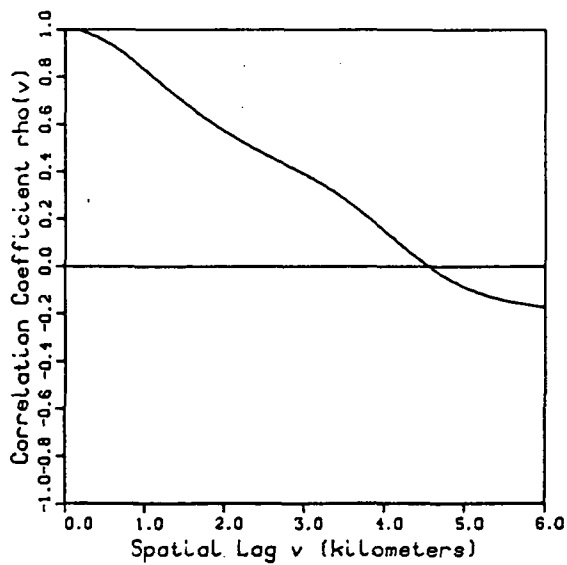
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.517	0.0	1.000	0.00	1.000
2	0.418	0.2	0.993	0.04	1.003
3	0.353	0.4	0.972	0.16	1.007
4	0.314	0.6	0.940	0.36	1.010
5	0.282	0.8	0.900	0.64	1.011
6	0.232	1.0	0.853	1.00	1.012
7	0.193	1.2	0.802	1.44	1.010
8	0.158	1.4	0.749	1.96	1.005
9	0.131	1.6	0.694	2.56	0.997
10	0.110	1.8	0.639	3.24	0.987
11	0.092	2.0	0.584	4.00	0.973
12	0.071	2.2	0.530	4.84	0.958
13	0.052	2.4	0.477	5.76	0.939
14	0.036	2.6	0.425	6.76	0.917
15	0.028	2.8	0.376	7.84	0.892
16	0.022	3.0	0.330	9.00	0.864
17	0.016	3.2	0.287	10.24	0.834
18	0.010	3.4	0.248	11.56	0.802
19	0.004	3.6	0.211	12.96	0.767
20	0.000	3.8	0.177	14.44	0.729
		4.0	0.146	16.00	0.685
		4.2	0.117	17.64	0.635
		4.4	0.091	19.36	0.579
		4.6	0.066	21.16	0.514
		4.8	0.042	23.04	0.437
		5.0	0.020	25.00	0.347
		5.2	-.001	27.04	0.272
		5.4	-.020	29.16	0.196
		5.6	-.037	31.36	0.132
		5.8	-.052	33.64	0.061
		6.0	-.065	36.00	0.023

Walnut Gulch, Arizona
Ac=154.21 sq.km.

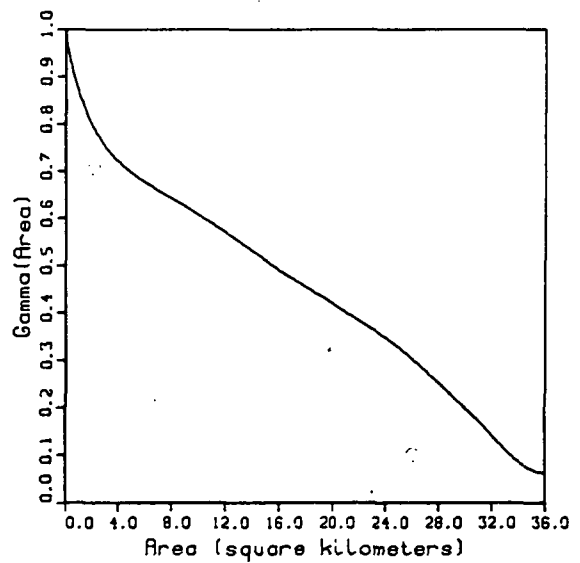
Storm Day
Sept 2, 1975



Spatial Correlation



Variance Function



Storm Day Sept 2 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.413$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.587$

Expected Value of Point Depth (mm.): $E(Y) = 0.717$

Variance of Point Depth (mm. sq.): $Var(Y) = 1.967$

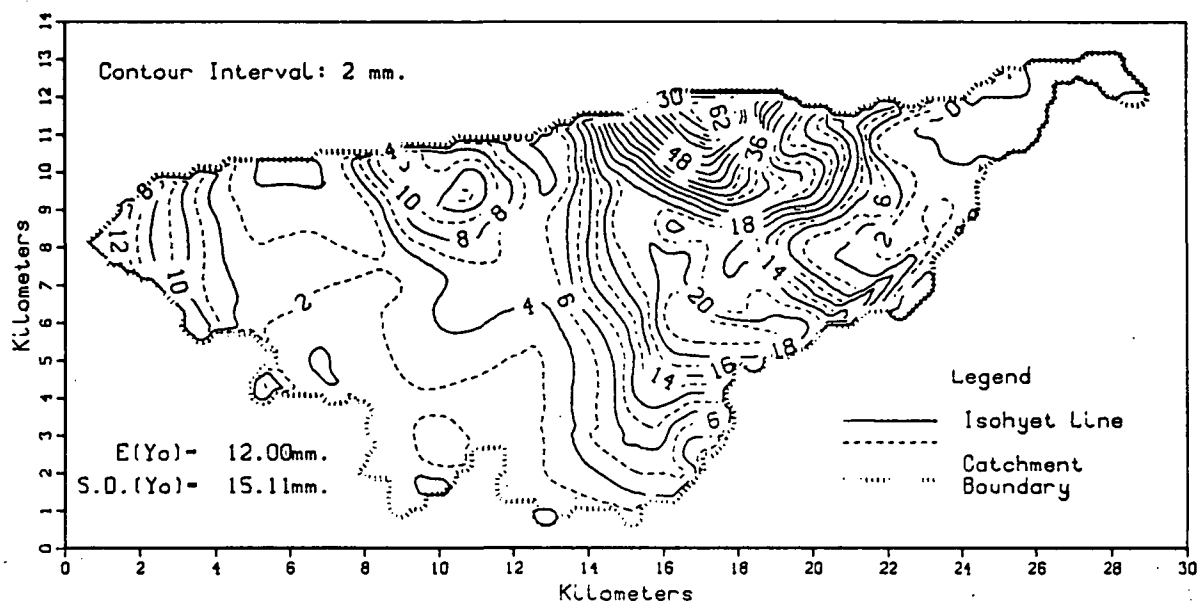
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.651$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.202	0.0	1.000	0.00	1.000
2	0.119	0.2	0.991	0.04	0.984
3	0.091	0.4	0.966	0.16	0.961
4	0.062	0.6	0.927	0.36	0.932
5	0.025	0.8	0.880	0.64	0.898
6	0.011	1.0	0.825	1.00	0.864
7	0.006	1.2	0.769	1.44	0.830
8	0.002	1.4	0.713	1.96	0.799
9	0.000	1.6	0.661	2.56	0.769
		1.8	0.612	3.24	0.742
		2.0	0.567	4.00	0.718
		2.2	0.526	4.84	0.697
		2.4	0.488	5.76	0.678
		2.6	0.452	6.76	0.660
		2.8	0.418	7.84	0.642
		3.0	0.384	9.00	0.622
		3.2	0.346	10.24	0.600
		3.4	0.303	11.56	0.576
		3.6	0.254	12.96	0.549
		3.8	0.200	14.44	0.520
		4.0	0.144	16.00	0.488
		4.2	0.087	17.64	0.459
		4.4	0.033	19.36	0.429
		4.6	-.016	21.16	0.397
		4.8	-.058	23.04	0.363
		5.0	-.093	25.00	0.324
		5.2	-.121	27.04	0.275
		5.4	-.142	29.16	0.219
		5.6	-.158	31.36	0.162
		5.8	-.169	33.64	0.093
		6.0	-.178	36.00	0.061

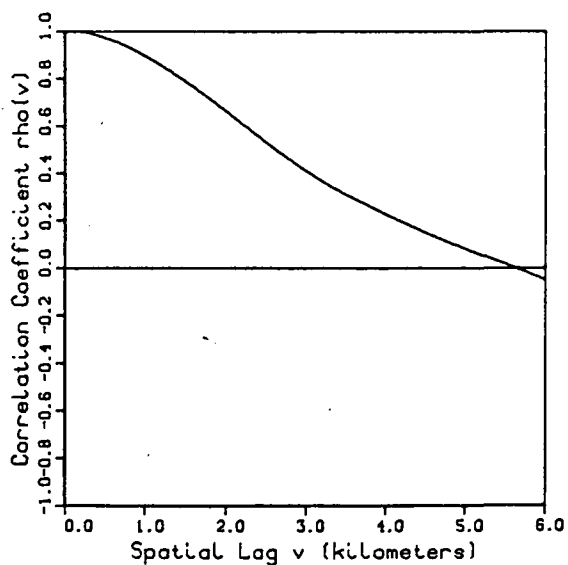
Walnut Gulch, Arizona

Ac-154.21 sq.km.

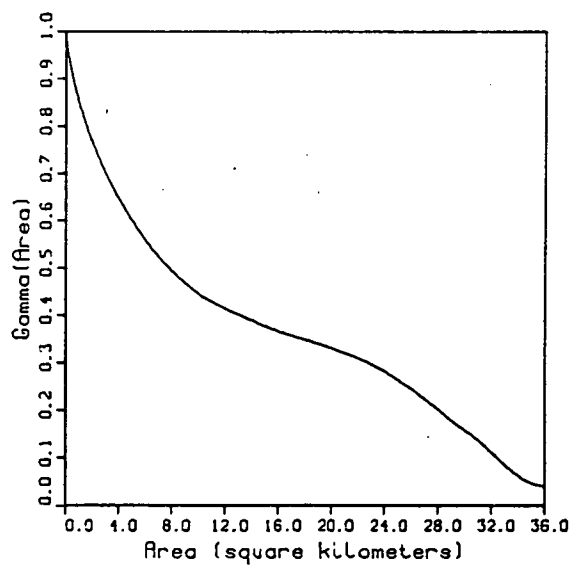
Storm Day
Sept 3, 1975



Spatial Correlation



Variance Function



Storm Day Sept 3 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.042$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.958$

Expected Value of Point Depth (mm.): $E(Y) = 9.955$

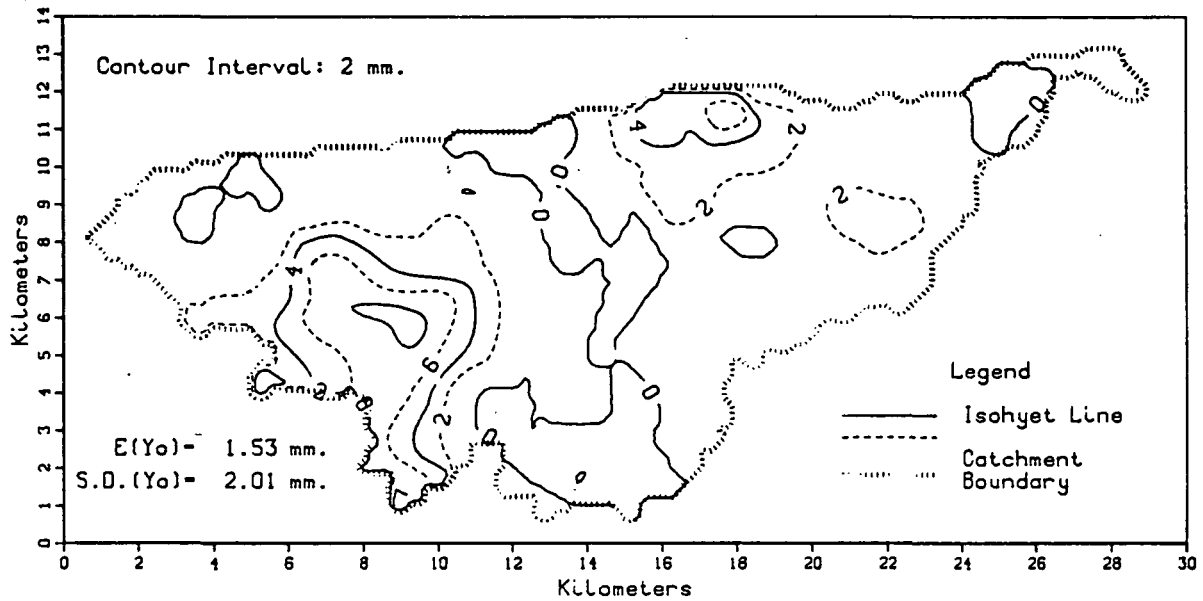
Variance of Point Depth (mm. sq.): $Var(Y)=153.880$

Coef. of Skewness of Point Depth: $S.C.(Y) = 2.464$

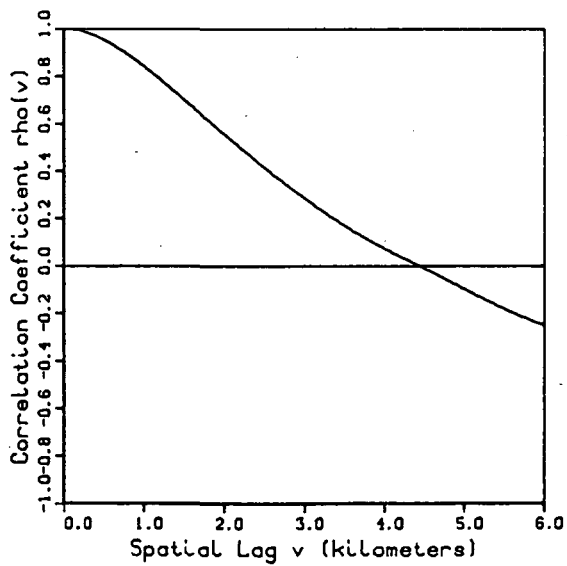
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.883	0.0	1.000	0.00	1.000
3	0.655	0.2	0.995	0.04	0.982
5	0.526	0.4	0.980	0.16	0.957
7	0.430	0.6	0.957	0.36	0.927
9	0.365	0.8	0.927	0.64	0.890
11	0.311	1.0	0.891	1.00	0.851
13	0.269	1.2	0.850	1.44	0.811
15	0.239	1.4	0.806	1.96	0.769
17	0.203	1.6	0.759	2.56	0.727
19	0.159	1.8	0.710	3.24	0.686
21	0.116	2.0	0.658	4.00	0.645
23	0.091	2.2	0.606	4.84	0.605
25	0.080	2.4	0.554	5.76	0.566
27	0.072	2.6	0.502	6.76	0.530
29	0.065	2.8	0.453	7.84	0.496
31	0.059	3.0	0.406	9.00	0.466
33	0.053	3.2	0.363	10.24	0.438
35	0.049	3.4	0.325	11.56	0.418
37	0.045	3.6	0.291	12.96	0.400
39	0.041	3.8	0.257	14.44	0.382
41	0.038	4.0	0.224	16.00	0.364
43	0.035	4.2	0.193	17.64	0.350
45	0.032	4.4	0.162	19.36	0.335
47	0.030	4.6	0.133	21.16	0.318
49	0.027	4.8	0.105	23.04	0.295
51	0.024	5.0	0.078	25.00	0.263
53	0.022	5.2	0.052	27.04	0.222
55	0.019	5.4	0.027	29.16	0.174
57	0.017	5.6	0.001	31.36	0.128
59	0.016	5.8	-.026	33.64	0.069
61	0.014	6.0	-.054	36.00	0.040
63	0.012				
65	0.010				
67	0.008				
69	0.005				
71	0.002				
73	0.000				

Walnut Gulch, Arizona
Ac=154.21 sq.km.

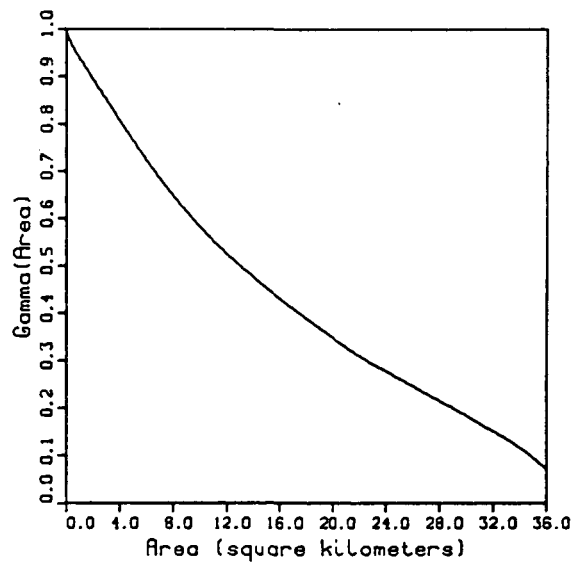
Storm Day
Sept 4, 1975



Spatial Correlation



Variance Function



Storm Day Sept 4 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.143$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.857$

Expected Value of Point Depth (mm.): $E(Y) = 1.674$

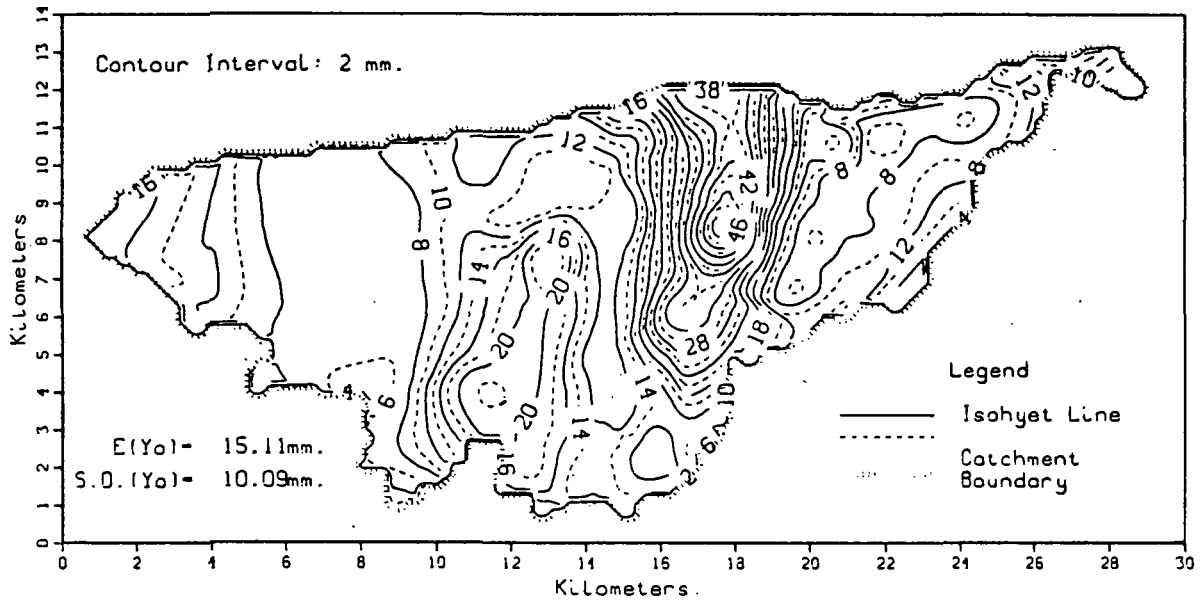
Variance of Point Depth (mm. sq.): $Var(Y) = 4.291$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.527$

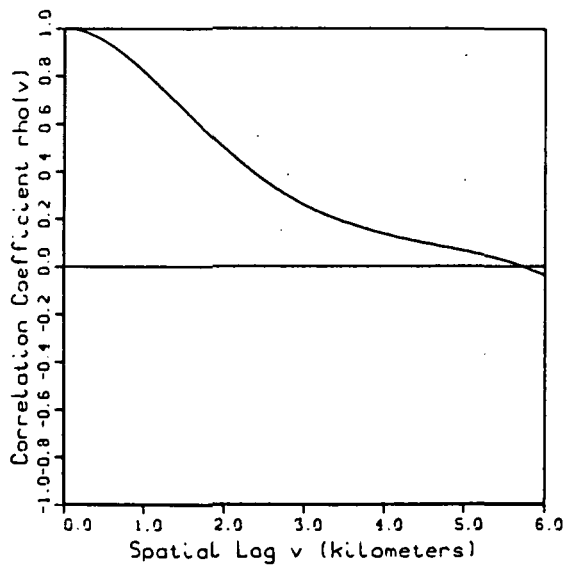
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km. sq.) Gamma (A)	
1	0.464	0.0	1.000	0.00	1.000
2	0.281	0.2	0.991	0.04	0.993
3	0.187	0.4	0.967	0.16	0.982
4	0.145	0.6	0.932	0.36	0.969
5	0.106	0.8	0.888	0.64	0.953
6	0.074	1.0	0.838	1.00	0.937
7	0.034	1.2	0.784	1.44	0.918
8	0.008	1.4	0.727	1.96	0.895
9	0.000	1.6	0.668	2.56	0.868
		1.8	0.610	3.24	0.838
		2.0	0.553	4.00	0.805
		2.2	0.495	4.84	0.769
		2.4	0.439	5.76	0.730
		2.6	0.385	6.76	0.691
		2.8	0.332	7.84	0.651
		3.0	0.282	9.00	0.612
		3.2	0.234	10.24	0.573
		3.4	0.189	11.56	0.535
		3.6	0.145	12.96	0.499
		3.8	0.105	14.44	0.463
		4.0	0.069	16.00	0.429
		4.2	0.035	17.64	0.394
		4.4	0.002	19.36	0.358
		4.6	-.032	21.16	0.324
		4.8	-.066	23.04	0.290
		5.0	-.101	25.00	0.260
		5.2	-.136	27.04	0.228
		5.4	-.170	29.16	0.195
		5.6	-.202	31.36	0.160
		5.8	-.231	33.64	0.121
		6.0	-.256	36.00	0.070

Walnut Gulch, Arizona
Ac=154.21 sq.km.

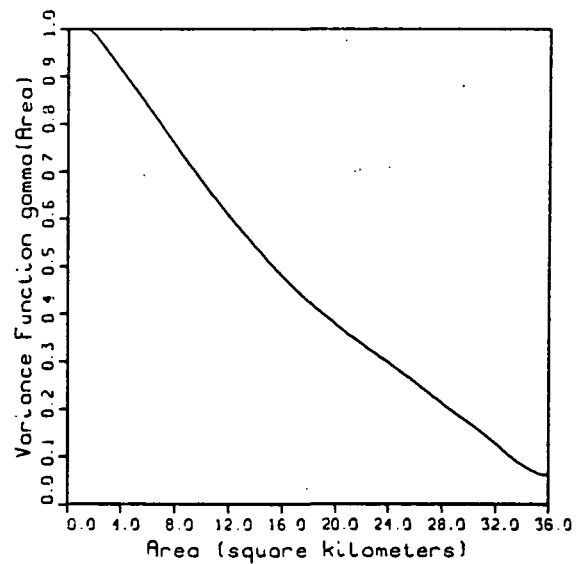
Storm Day
Sept 5, 1975



Spatial Correlation



Variance Function



Storm Day Sept 5 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 14.946$

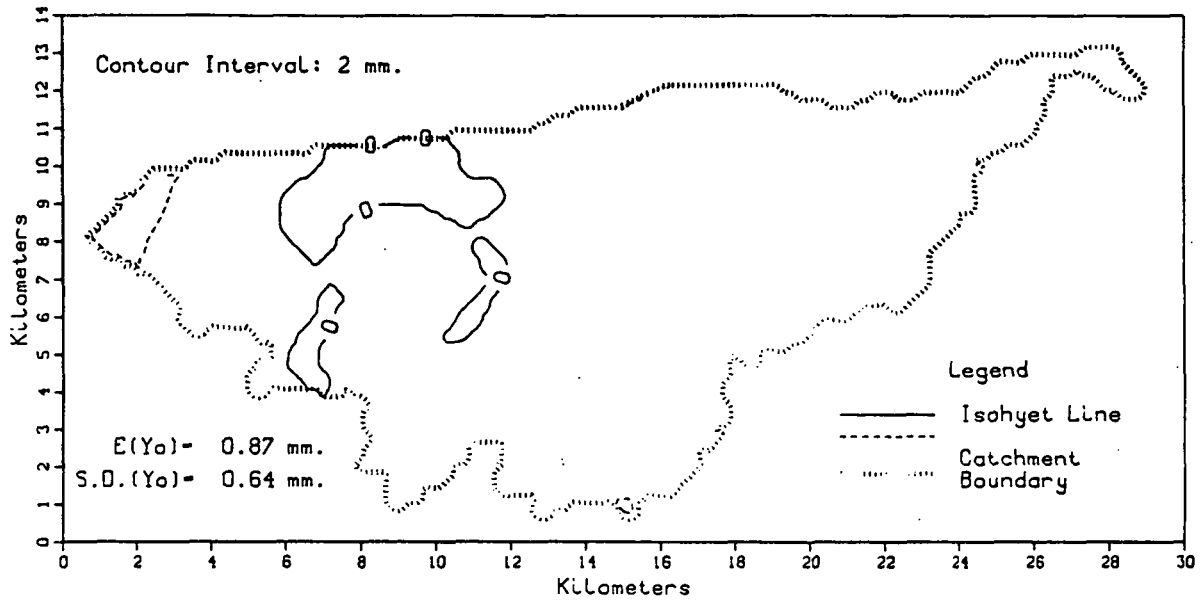
Variance of Point Depth (mm. sq.): $Var(Y) = 85.242$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.729$

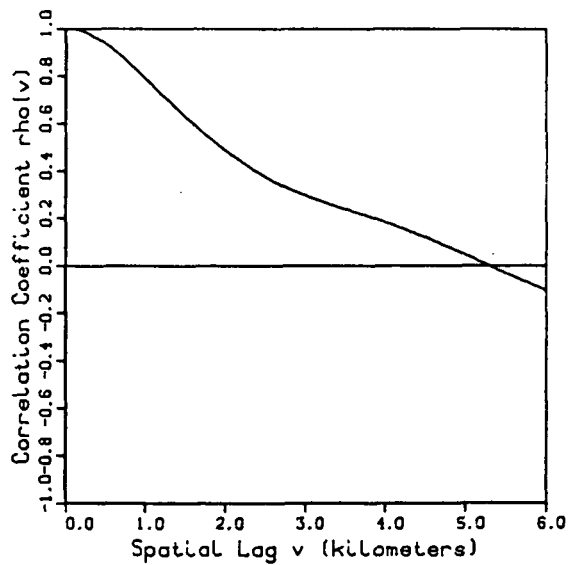
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
3	1.000	0.2	0.991	0.04	1.013
5	0.996	0.4	0.965	0.16	1.023
7	0.862	0.6	0.925	0.36	1.028
9	0.714	0.8	0.875	0.64	1.025
11	0.584	1.0	0.817	1.00	1.018
13	0.451	1.2	0.754	1.44	1.006
15	0.351	1.4	0.689	1.96	0.989
17	0.272	1.6	0.623	2.56	0.967
19	0.221	1.8	0.559	3.24	0.942
21	0.173	2.0	0.497	4.00	0.912
23	0.138	2.2	0.439	4.84	0.880
25	0.123	2.4	0.385	5.76	0.844
27	0.110	2.6	0.336	6.76	0.804
29	0.097	2.8	0.293	7.84	0.762
31	0.085	3.0	0.256	9.00	0.716
33	0.071	3.2	0.224	10.24	0.668
35	0.058	3.4	0.196	11.56	0.620
37	0.051	3.6	0.173	12.96	0.573
39	0.043	3.8	0.152	14.44	0.525
41	0.034	4.0	0.133	16.00	0.477
43	0.020	4.2	0.116	17.64	0.432
45	0.014	4.4	0.101	19.36	0.391
47	0.009	4.6	0.088	21.16	0.353
49	0.006	4.8	0.075	23.04	0.315
51	0.003	5.0	0.062	25.00	0.276
53	0.001	5.2	0.047	27.04	0.232
		5.4	0.031	29.16	0.186
		5.6	0.011	31.36	0.142
		5.8	-.013	33.64	0.088
		6.0	-.041	36.00	0.060

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

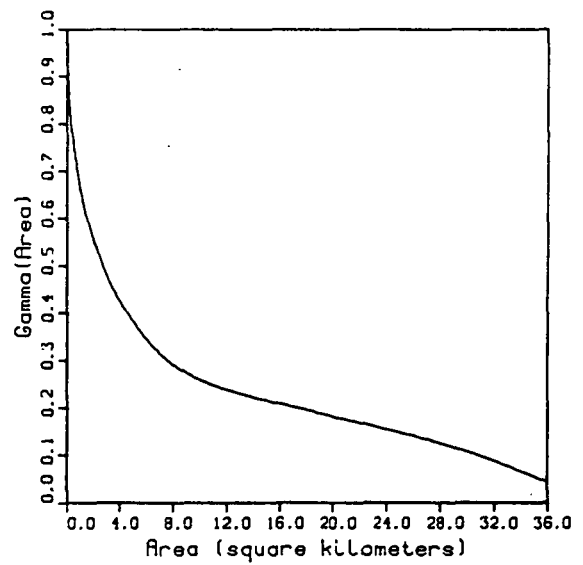
Storm Day
 Sept 6, 1975



Spatial Correlation



Variance Function



Storm Day Sept 6 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c) = 0.067$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c) = 0.933$

Expected Value of Point Depth (mm.): $E(Y) = 0.845$

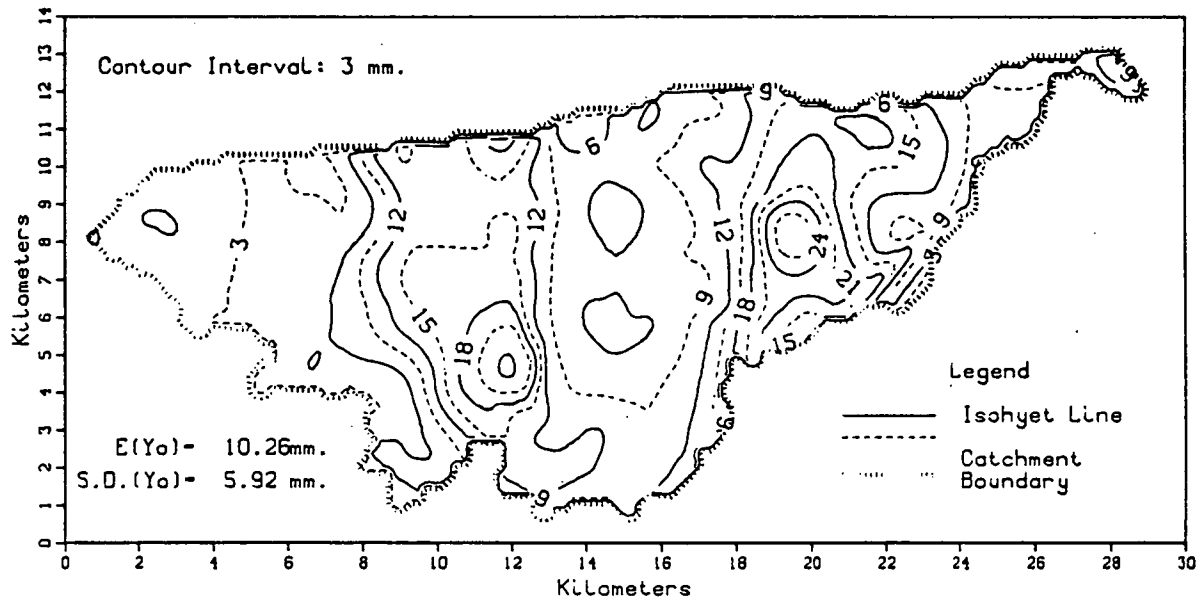
Variance of Point Depth (mm. sq.): $Var(Y) = 0.280$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.437$

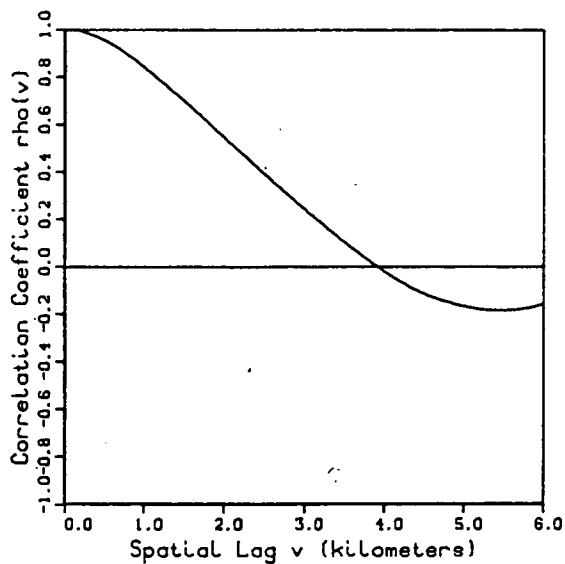
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.350	0.0	1.000	0.00	1.000
2	0.017	0.2	0.988	0.04	0.927
3	0.000	0.4	0.955	0.16	0.856
		0.6	0.907	0.36	0.789
		0.8	0.849	0.64	0.727
		1.0	0.785	1.00	0.667
		1.2	0.720	1.44	0.610
		1.4	0.656	1.96	0.558
		1.6	0.595	2.56	0.510
		1.8	0.537	3.24	0.464
		2.0	0.484	4.00	0.424
		2.2	0.436	4.84	0.386
		2.4	0.392	5.76	0.351
		2.6	0.354	6.76	0.320
		2.8	0.321	7.84	0.292
		3.0	0.293	9.00	0.271
		3.2	0.268	10.24	0.254
		3.4	0.245	11.56	0.240
		3.6	0.224	12.96	0.228
		3.8	0.203	14.44	0.217
		4.0	0.179	16.00	0.206
		4.2	0.154	17.64	0.196
		4.4	0.128	19.36	0.184
		4.6	0.101	21.16	0.172
		4.8	0.072	23.04	0.159
		5.0	0.041	25.00	0.146
		5.2	0.010	27.04	0.131
		5.4	-0.021	29.16	0.113
		5.6	-0.051	31.36	0.093
		5.8	-0.080	33.64	0.069
		6.0	-0.108	36.00	0.043

Walnut Gulch, Arizona
Ac=154.21 sq.km.

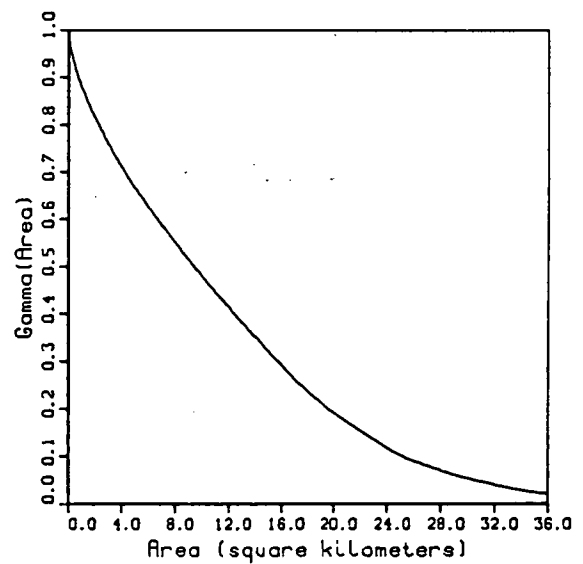
Storm Day
Sept 7, 1975



Spatial Correlation



Variance Function



Storm Day Sept 7 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.001$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.999$

Expected Value of Point Depth (mm.): $E(Y) = 10.665$

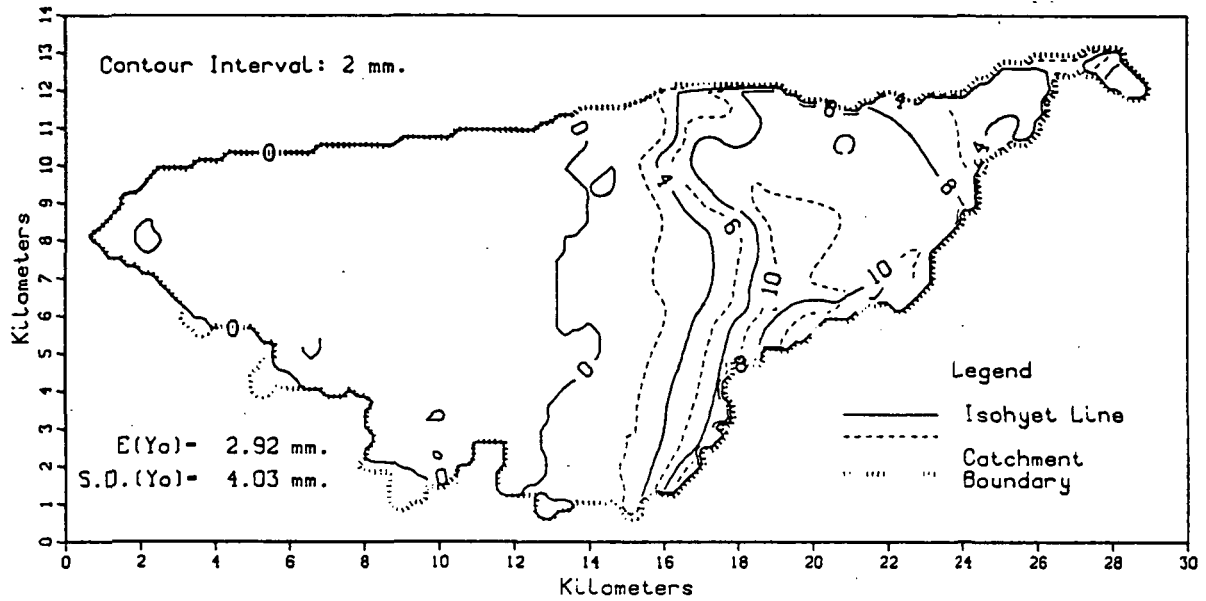
Variance of Point Depth (mm. sq.): $Var(Y) = 35.272$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.518$

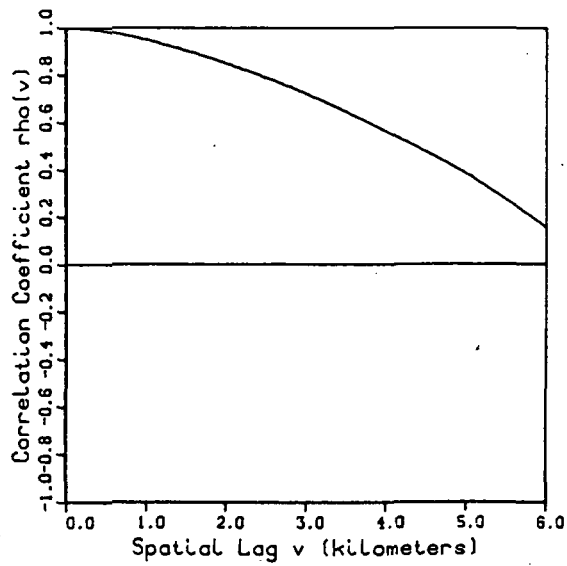
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.958	0.0	1.000	0.00	1.000
2	0.947	0.2	0.991	0.04	0.983
3	0.925	0.4	0.968	0.16	0.961
4	0.880	0.6	0.934	0.36	0.937
5	0.846	0.8	0.890	0.64	0.909
6	0.777	1.0	0.839	1.00	0.879
7	0.691	1.2	0.783	1.44	0.849
8	0.630	1.4	0.726	1.96	0.817
9	0.571	1.6	0.667	2.56	0.783
10	0.510	1.8	0.606	3.24	0.745
11	0.450	2.0	0.543	4.00	0.709
12	0.392	2.2	0.481	4.84	0.671
13	0.331	2.4	0.419	5.76	0.634
14	0.277	2.6	0.358	6.76	0.595
15	0.225	2.8	0.298	7.84	0.555
16	0.184	3.0	0.239	9.00	0.513
17	0.150	3.2	0.183	10.24	0.471
18	0.112	3.4	0.127	11.56	0.427
19	0.086	3.6	0.074	12.96	0.383
20	0.072	3.8	0.024	14.44	0.338
21	0.060	4.0	-0.024	16.00	0.291
22	0.050	4.2	-0.067	17.64	0.244
23	0.039	4.4	-0.103	19.36	0.204
24	0.027	4.6	-0.132	21.16	0.168
25	0.020	4.8	-0.154	23.04	0.133
26	0.014	5.0	-0.171	25.00	0.100
27	0.009	5.2	-0.184	27.04	0.078
28	0.003	5.4	-0.188	29.16	0.058
29	0.000	5.6	-0.185	31.36	0.043
		5.8	-0.175	33.64	0.029
		6.0	-0.160	36.00	0.020

Walnut Gulch, Arizona
Ac=154.21 sq.km.

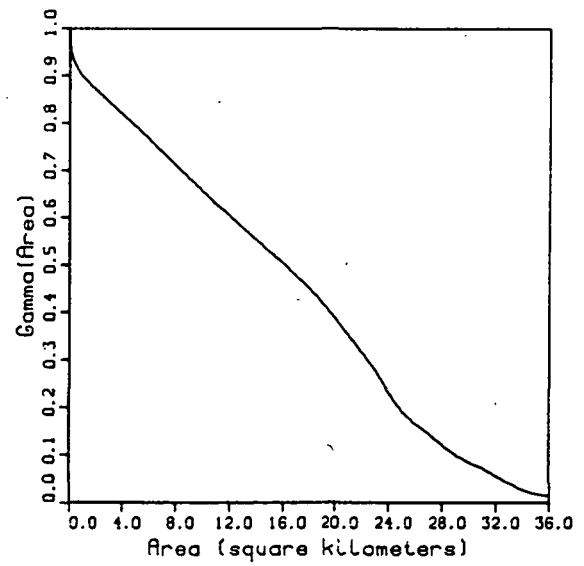
Storm Day
Sept 8 ,1975



Spatial Correlation



Variance Function



Storm Day Sept 8 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.451$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.549$

Expected Value of Point Depth (mm.): $E(Y) = 2.922$

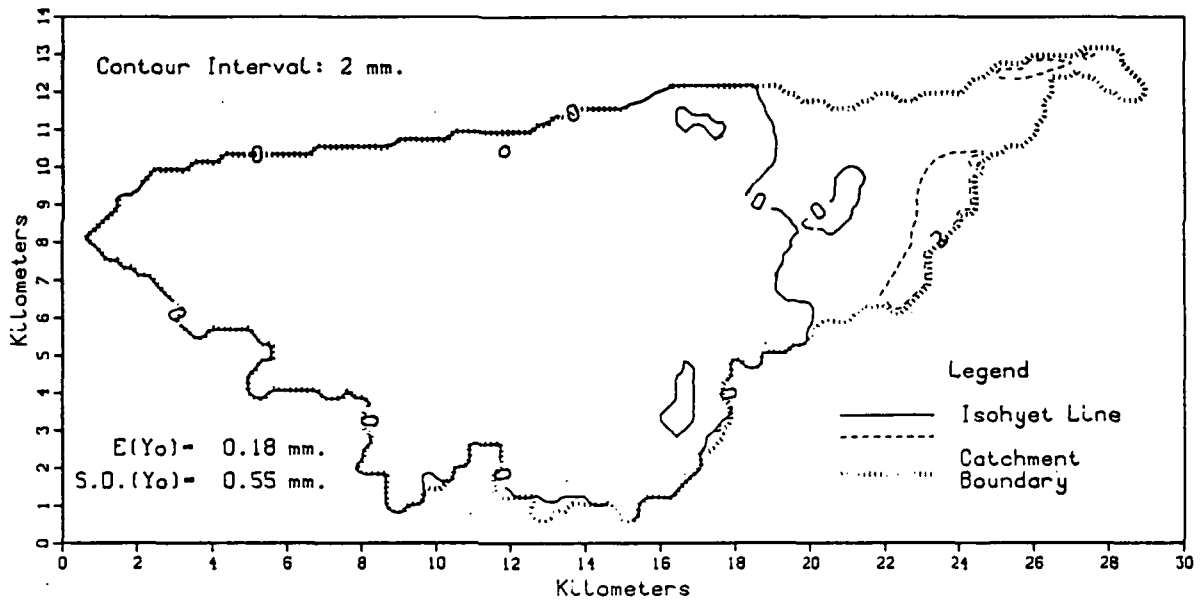
Variance of Point Depth (mm. sq.): $Var(Y) = 15.536$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.995$

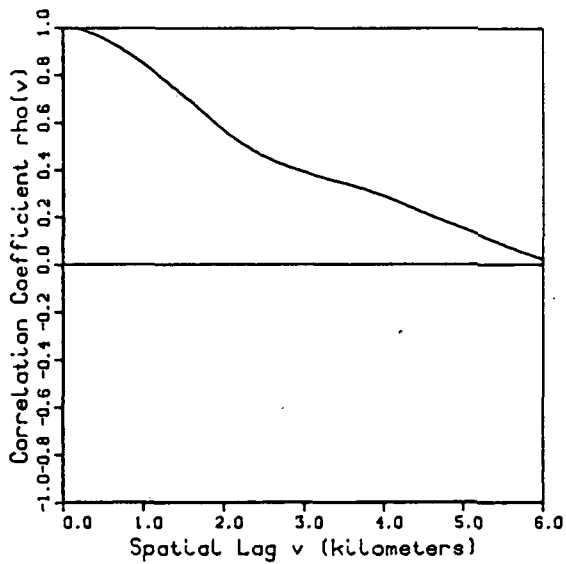
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.420	0.0	1.000	0.00	1.000
2	0.382	0.2	0.996	0.04	0.973
3	0.353	0.4	0.987	0.16	0.947
4	0.319	0.6	0.975	0.36	0.929
5	0.282	0.8	0.961	0.64	0.912
6	0.254	1.0	0.944	1.00	0.898
7	0.226	1.2	0.927	1.44	0.884
8	0.193	1.4	0.908	1.96	0.870
9	0.117	1.6	0.888	2.56	0.854
10	0.052	1.8	0.868	3.24	0.836
11	0.025	2.0	0.846	4.00	0.817
12	0.013	2.2	0.822	4.84	0.796
13	0.008	2.4	0.798	5.76	0.771
14	0.004	2.6	0.772	6.76	0.744
15	0.001	2.8	0.745	7.84	0.714
16	0.000	3.0	0.717	9.00	0.682
		3.2	0.687	10.24	0.648
		3.4	0.656	11.56	0.614
		3.6	0.625	12.96	0.578
		3.8	0.592	14.44	0.542
		4.0	0.559	16.00	0.502
		4.2	0.525	17.64	0.459
		4.4	0.490	19.36	0.408
		4.6	0.455	21.16	0.345
		4.8	0.419	23.04	0.274
		5.0	0.380	25.00	0.190
		5.2	0.337	27.04	0.143
		5.4	0.293	29.16	0.096
		5.6	0.249	31.36	0.066
		5.8	0.202	33.64	0.030
		6.0	0.154	36.00	0.014

Walnut Gulch, Arizona
 $A_c = 154.21$ sq.km.

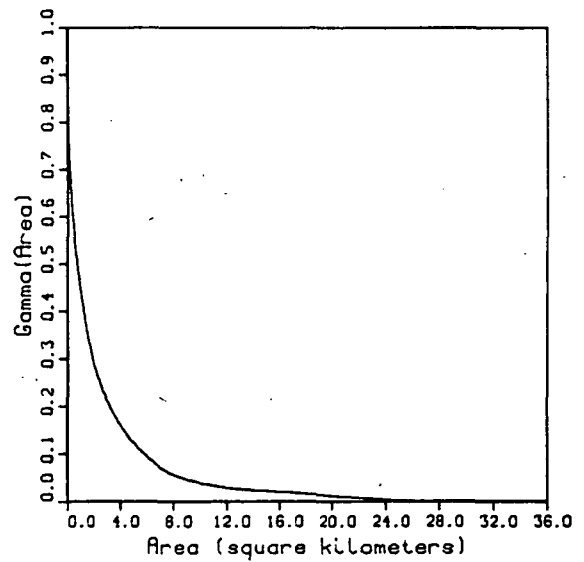
Storm Day
 Sept 11, 1975



Spatial Correlation



Variance Function



Storm Day Sept 11 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.788$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.212$

Expected Value of Point Depth (mm.): $E(Y) = 0.192$

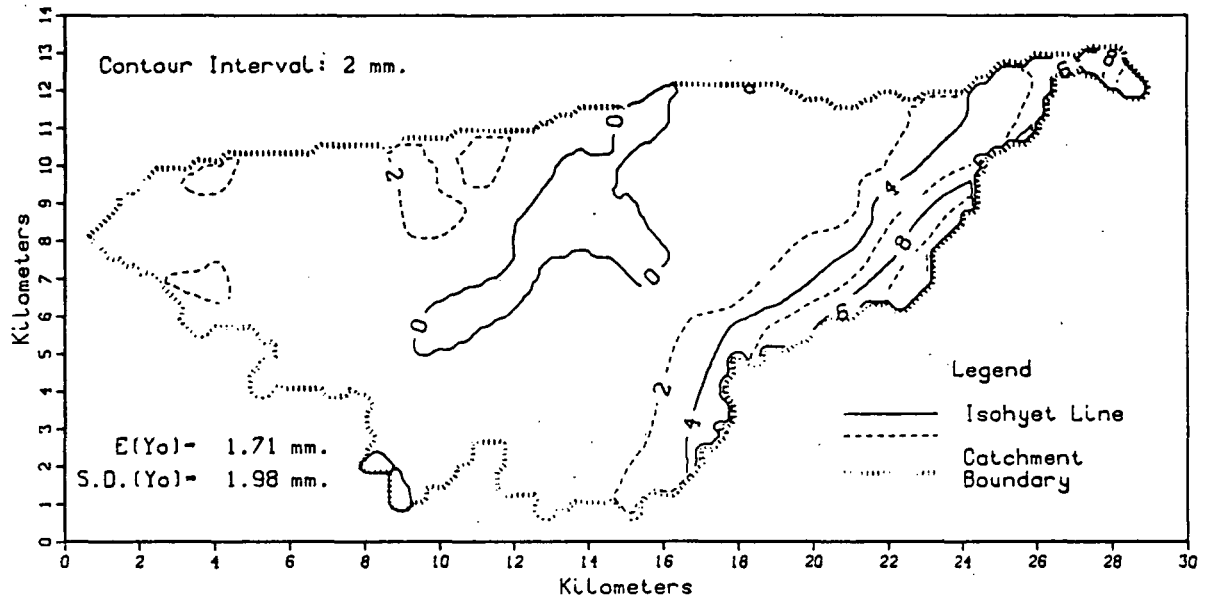
Variance of Point Depth (mm. sq.): $Var(Y) = 0.292$

Coef. of Skewness of Point Depth: $S.C.(Y) = 3.240$

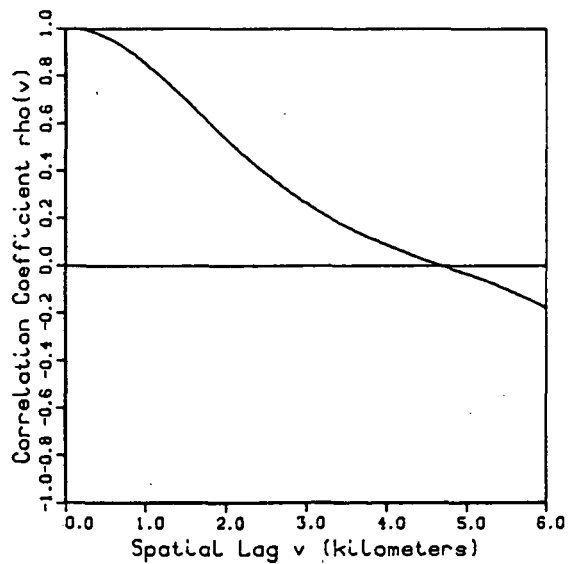
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.077	0.0	1.000	0.00	1.000
2	0.028	0.2	0.991	0.04	0.856
3	0.001	0.4	0.968	0.16	0.726
4	0.000	0.6	0.934	0.36	0.622
		0.8	0.892	0.64	0.533
		1.0	0.845	1.00	0.450
		1.2	0.792	1.44	0.369
		1.4	0.737	1.96	0.298
		1.6	0.681	2.56	0.243
		1.8	0.623	3.24	0.198
		2.0	0.564	4.00	0.159
		2.2	0.514	4.84	0.127
		2.4	0.472	5.76	0.099
		2.6	0.438	6.76	0.075
		2.8	0.410	7.84	0.056
		3.0	0.387	9.00	0.045
		3.2	0.366	10.24	0.036
		3.4	0.347	11.56	0.030
		3.6	0.330	12.96	0.025
		3.8	0.309	14.44	0.022
		4.0	0.286	16.00	0.019
		4.2	0.258	17.64	0.015
		4.4	0.230	19.36	0.012
		4.6	0.202	21.16	0.007
		4.8	0.176	23.04	0.004
		5.0	0.149	25.00	0.001
		5.2	0.123	27.04	0.000
		5.4	0.096	29.16	0.000
		5.6	0.069	31.36	0.000
		5.8	0.044	33.64	0.000
		6.0	0.020	36.00	0.000

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

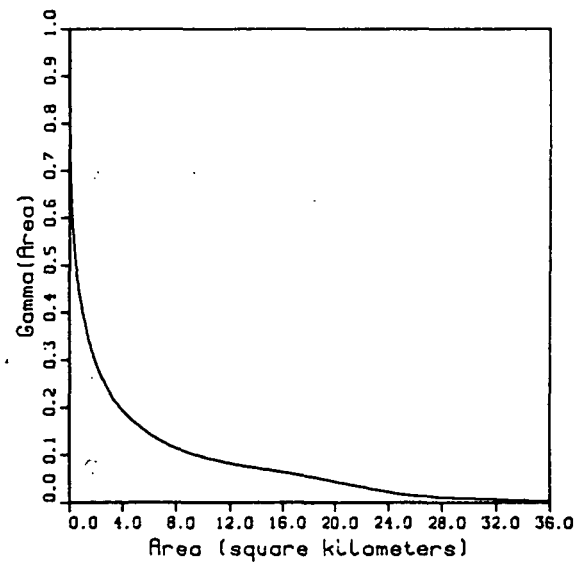
Storm Day
 Sept 12, 1975



Spatial Correlation



Variance Function



Storm Day Sept 12 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.071$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.929$

Expected Value of Point Depth (mm.): $E(Y) = 1.811$

Variance of Point Depth (mm. sq.): $Var(Y) = 5.088$

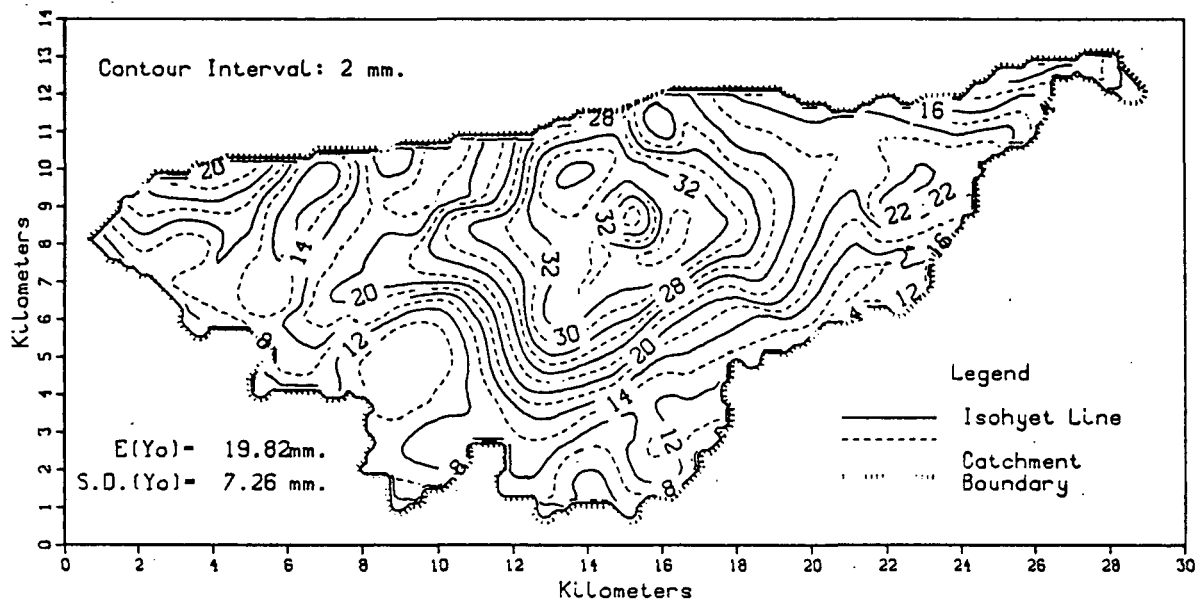
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.602$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.554	0.0	1.000	0.00	1.000
2	0.236	0.2	0.994	0.04	0.820
3	0.152	0.4	0.976	0.16	0.650
4	0.117	0.6	0.944	0.36	0.541
5	0.083	0.8	0.901	0.64	0.468
6	0.058	1.0	0.848	1.00	0.403
7	0.041	1.2	0.790	1.44	0.343
8	0.028	1.4	0.727	1.96	0.292
9	0.021	1.6	0.661	2.56	0.253
10	0.013	1.8	0.595	3.24	0.220
11	0.006	2.0	0.530	4.00	0.192
12	0.004	2.2	0.470	4.84	0.168
13	0.003	2.4	0.412	5.76	0.148
14	0.002	2.6	0.357	6.76	0.130
15	0.002	2.8	0.305	7.84	0.114
16	0.001	3.0	0.258	9.00	0.102
17	0.000	3.2	0.215	10.24	0.092
18	0.000	3.4	0.176	11.56	0.083
19	0.000	3.6	0.142	12.96	0.076
		3.8	0.110	14.44	0.069
		4.0	0.082	16.00	0.062
		4.2	0.055	17.64	0.054
		4.4	0.027	19.36	0.045
		4.6	0.003	21.16	0.035
		4.8	-0.018	23.04	0.025
		5.0	-0.040	25.00	0.015
		5.2	-0.064	27.04	0.012
		5.4	-0.091	29.16	0.008
		5.6	-0.121	31.36	0.006
		5.8	-0.151	33.64	0.004
		6.0	-0.184	36.00	0.002

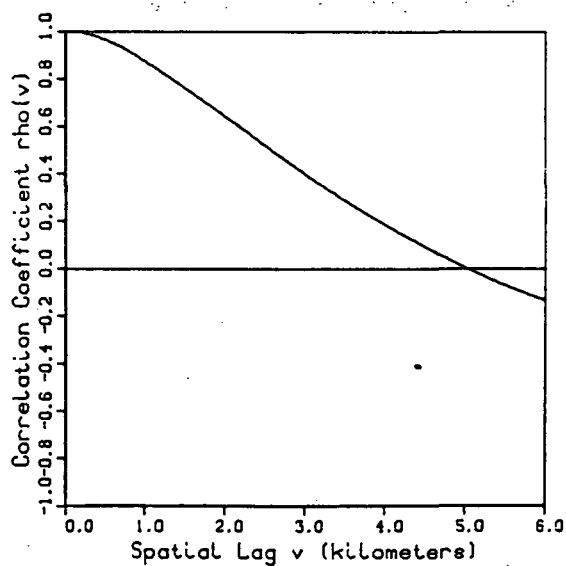
Walnut Gulch, Arizona

Ac=154.21 sq.km.

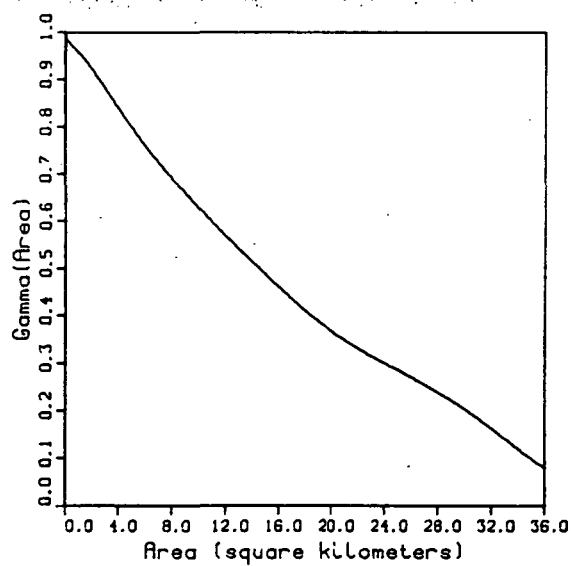
Storm Day
Sept 13, 1975



Spatial Correlation



Variance Function



Storm Day Sept 13 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 19.634$

Variance of Point Depth (mm. sq.): $Var(Y) = 52.091$

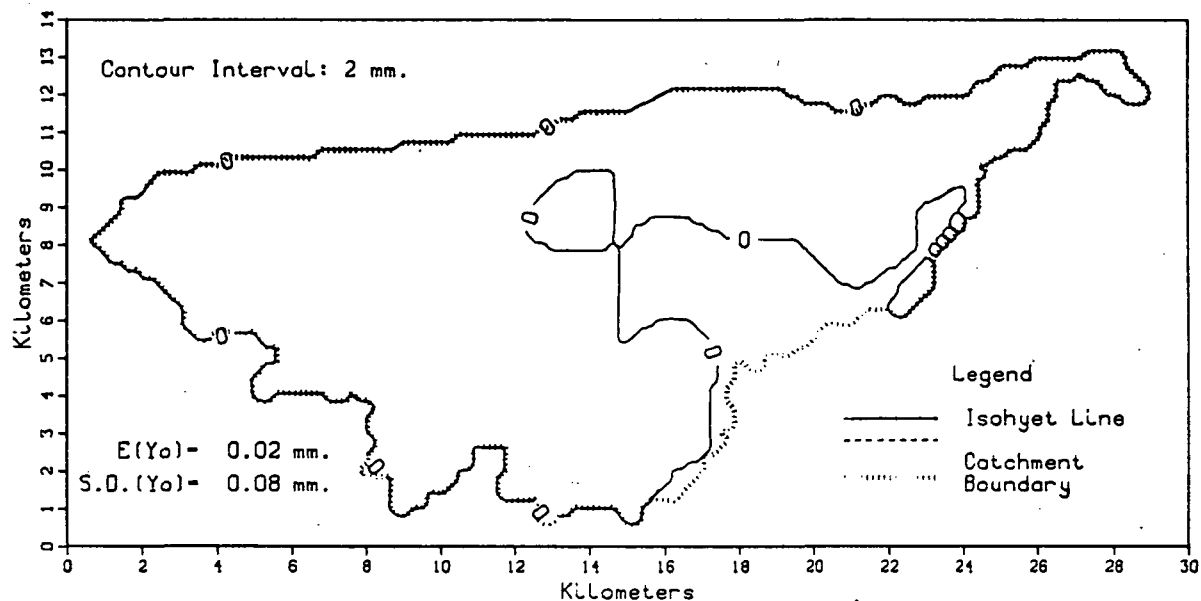
Coef. of Skewness of Point Depth: S.C.(Y) = 0.464

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.994	0.04	0.992
3	1.000	0.4	0.975	0.16	0.983
4	1.000	0.6	0.948	0.36	0.974
5	1.000	0.8	0.912	0.64	0.966
6	1.000	1.0	0.872	1.00	0.955
7	0.999	1.2	0.828	1.44	0.941
8	0.993	1.4	0.782	1.96	0.922
9	0.974	1.6	0.735	2.56	0.898
10	0.947	1.8	0.688	3.24	0.869
11	0.915	2.0	0.640	4.00	0.837
12	0.866	2.2	0.592	4.84	0.803
13	0.804	2.4	0.543	5.76	0.766
14	0.742	2.6	0.493	6.76	0.731
15	0.686	2.8	0.445	7.84	0.694
16	0.637	3.0	0.397	9.00	0.656
17	0.593	3.2	0.350	10.24	0.618
18	0.547	3.4	0.305	11.56	0.579
19	0.500	3.6	0.262	12.96	0.539
20	0.452	3.8	0.221	14.44	0.499
21	0.399	4.0	0.181	16.00	0.458
22	0.347	4.2	0.143	17.64	0.417
23	0.304	4.4	0.105	19.36	0.378
24	0.264	4.6	0.068	21.16	0.344
25	0.235	4.8	0.033	23.04	0.312
26	0.212	5.0	-.001	25.00	0.284
27	0.192	5.2	-.032	27.04	0.252
28	0.172	5.4	-.063	29.16	0.217
29	0.152	5.6	-.090	31.36	0.175
30	0.131	5.8	-.116	33.64	0.126
31	0.110	6.0	-.141	36.00	0.078
32	0.087				
33	0.059				
34	0.024				
35	0.008				
36	0.003				
37	0.000				

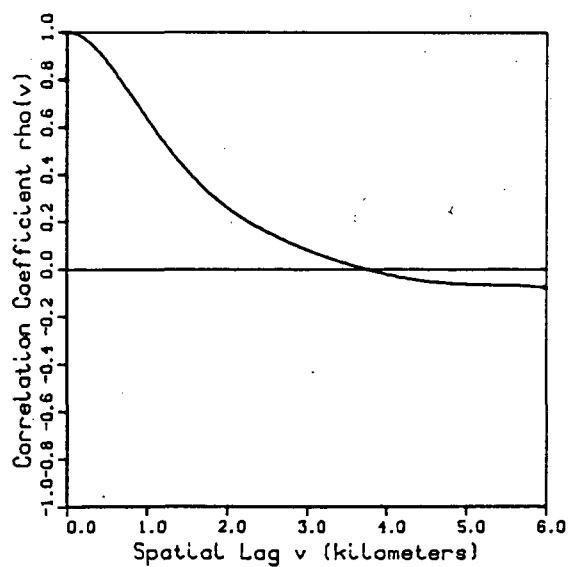
Walnut Gulch, Arizona

$A_c=154.21$ sq.km.

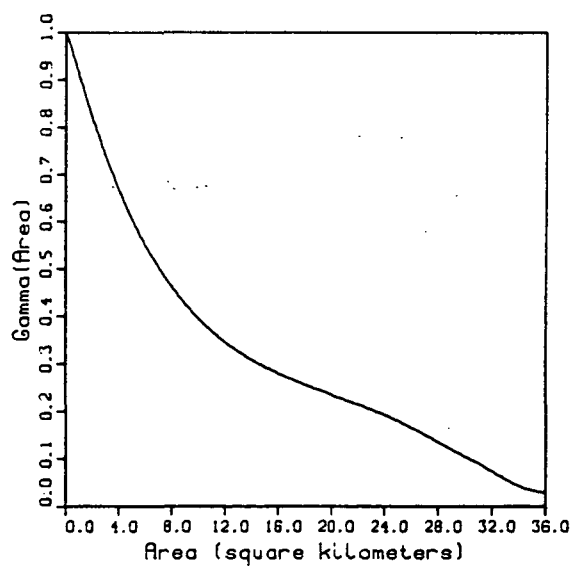
Storm Day
Sept 30, 1975



Spatial Correlation



Variance Function



Storm Day Sept 30 1975

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.826$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.174$

Expected Value of Point Depth (mm.): $E(Y) = 0.025$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.006$

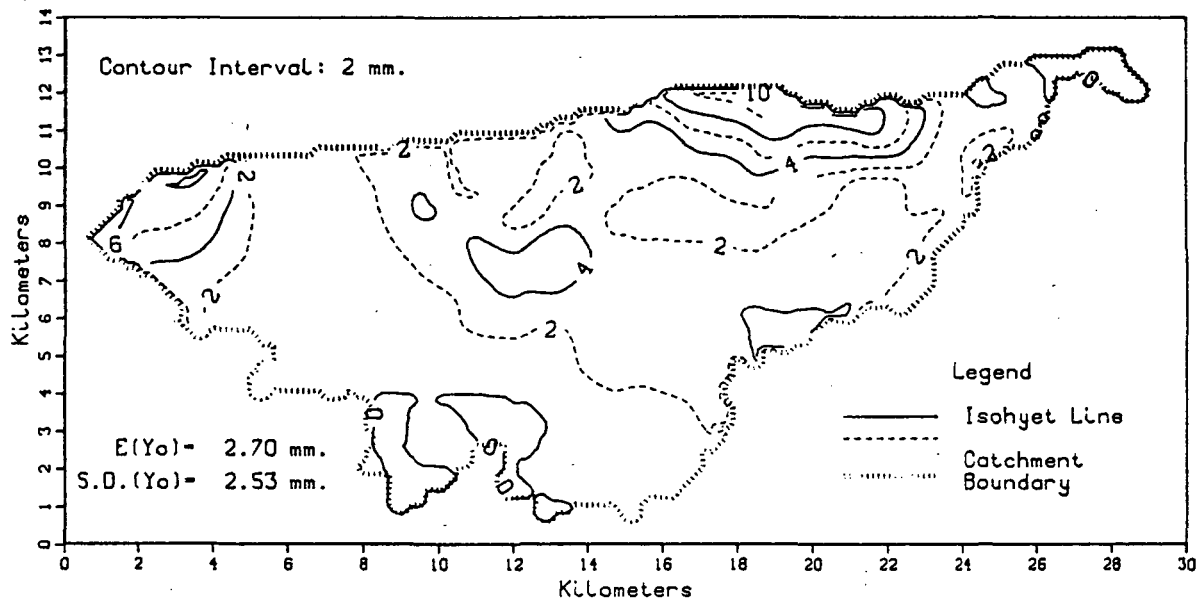
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.625$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.974	0.04	1.000
		0.4	0.911	0.16	0.989
		0.6	0.827	0.36	0.970
		0.8	0.732	0.64	0.943
		1.0	0.632	1.00	0.909
		1.2	0.537	1.44	0.869
		1.4	0.450	1.96	0.823
		1.6	0.374	2.56	0.772
		1.8	0.310	3.24	0.719
		2.0	0.255	4.00	0.666
		2.2	0.210	4.84	0.612
		2.4	0.171	5.76	0.561
		2.6	0.136	6.76	0.511
		2.8	0.105	7.84	0.466
		3.0	0.077	9.00	0.424
		3.2	0.052	10.24	0.386
		3.4	0.029	11.56	0.353
		3.6	0.009	12.96	0.324
		3.8	-0.009	14.44	0.299
		4.0	-0.025	16.00	0.278
		4.2	-0.039	17.64	0.258
		4.4	-0.050	19.36	0.239
		4.6	-0.058	21.16	0.221
		4.8	-0.064	23.04	0.201
		5.0	-0.068	25.00	0.178
		5.2	-0.069	27.04	0.148
		5.4	-0.069	29.16	0.115
		5.6	-0.071	31.36	0.083
		5.8	-0.075	33.64	0.046
		6.0	-0.083	36.00	0.028

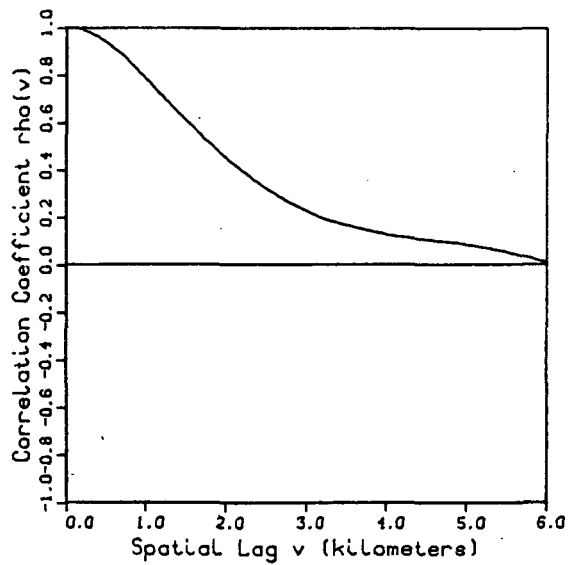
Walnut Gulch, Arizona

Ac=154.21 sq.km.

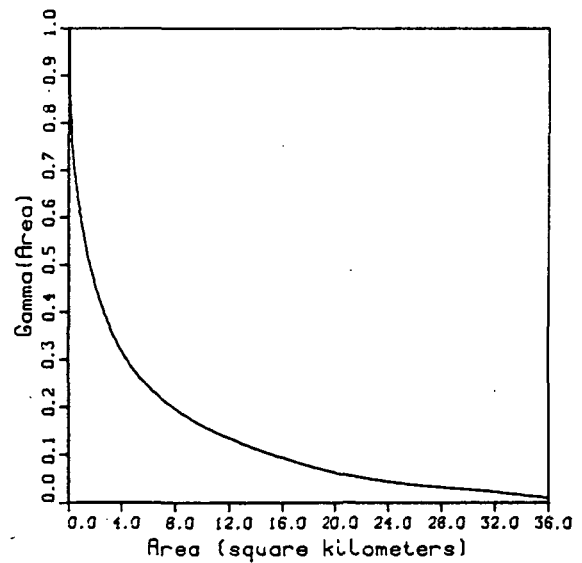
Storm Day
June 28, 1976



Spatial Correlation



Variance Function



Storm Day June 28 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.038$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.962$

Expected Value of Point Depth (mm.): $E(Y) = 2.413$

Variance of Point Depth (mm. sq.): $Var(Y) = 4.232$

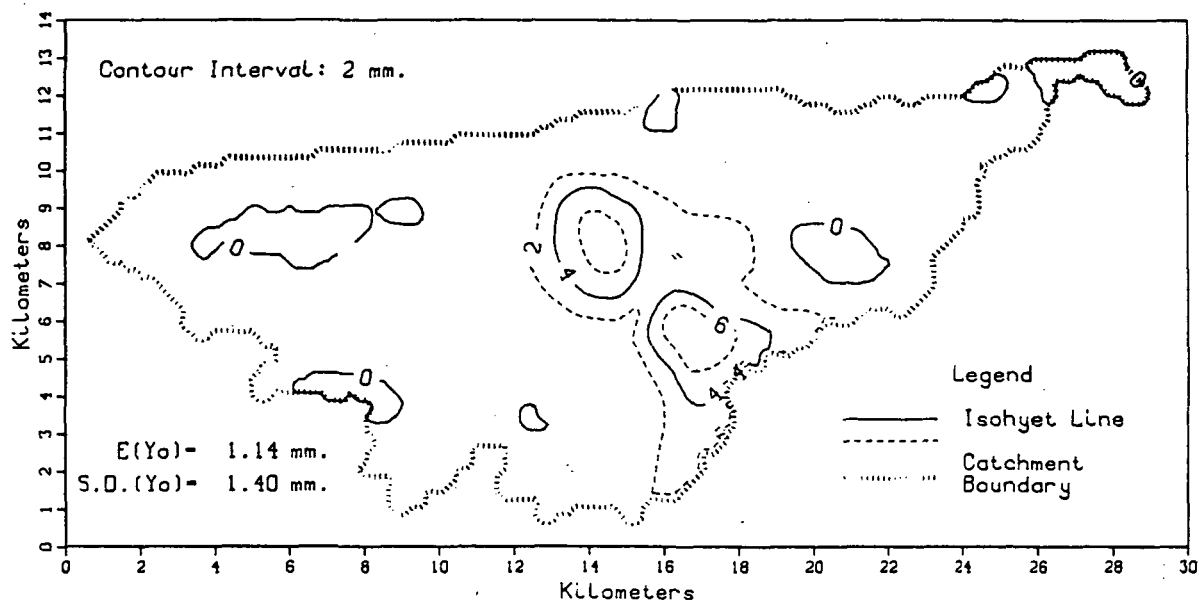
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.532$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.741	0.0	1.000	0.00	1.000
2	0.532	0.2	0.989	0.04	0.913
3	0.286	0.4	0.958	0.16	0.826
4	0.148	0.6	0.911	0.36	0.741
5	0.094	0.8	0.851	0.64	0.664
6	0.067	1.0	0.783	1.00	0.590
7	0.049	1.2	0.711	1.44	0.523
8	0.028	1.4	0.640	1.96	0.463
9	0.014	1.6	0.574	2.56	0.409
10	0.006	1.8	0.511	3.24	0.360
11	0.002	2.0	0.452	4.00	0.318
12	0.000	2.2	0.396	4.84	0.281
		2.4	0.346	5.76	0.249
		2.6	0.301	6.76	0.222
		2.8	0.261	7.84	0.198
		3.0	0.225	9.00	0.177
		3.2	0.196	10.24	0.157
		3.4	0.174	11.56	0.140
		3.6	0.156	12.96	0.123
		3.8	0.140	14.44	0.107
		4.0	0.126	16.00	0.092
		4.2	0.115	17.64	0.078
		4.4	0.107	19.36	0.065
		4.6	0.099	21.16	0.055
		4.8	0.093	23.04	0.047
		5.0	0.083	25.00	0.039
		5.2	0.071	27.04	0.034
		5.4	0.058	29.16	0.028
		5.6	0.043	31.36	0.023
		5.8	0.026	33.64	0.016
		6.0	0.008	36.00	0.009

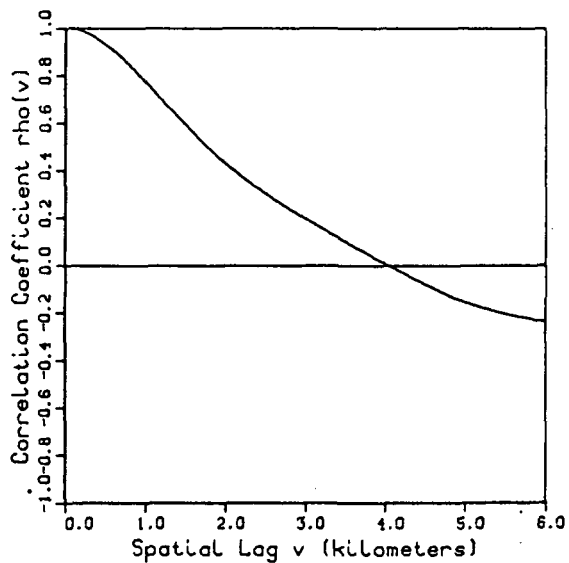
Walnut Gulch, Arizona

Ac=154.21 sq.km.

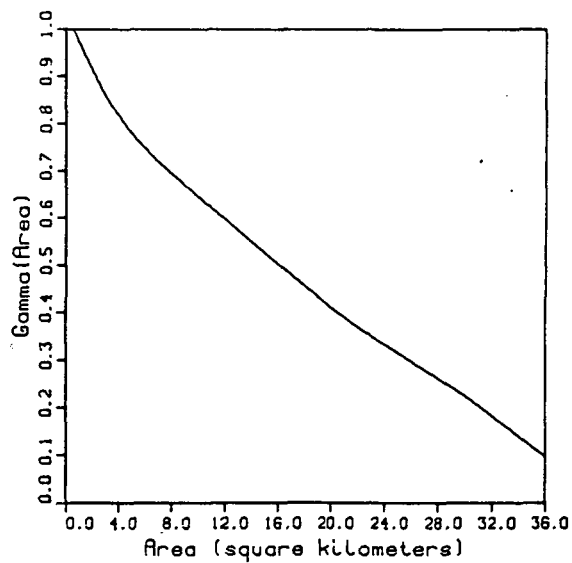
Storm Day
June 29, 1976



Spatial Correlation



Variance Function



Storm Day June 29 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.063$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.937$

Expected Value of Point Depth (mm.): $E(Y) = 1.216$

Variance of Point Depth (mm. sq.): $Var(Y) = 2.067$

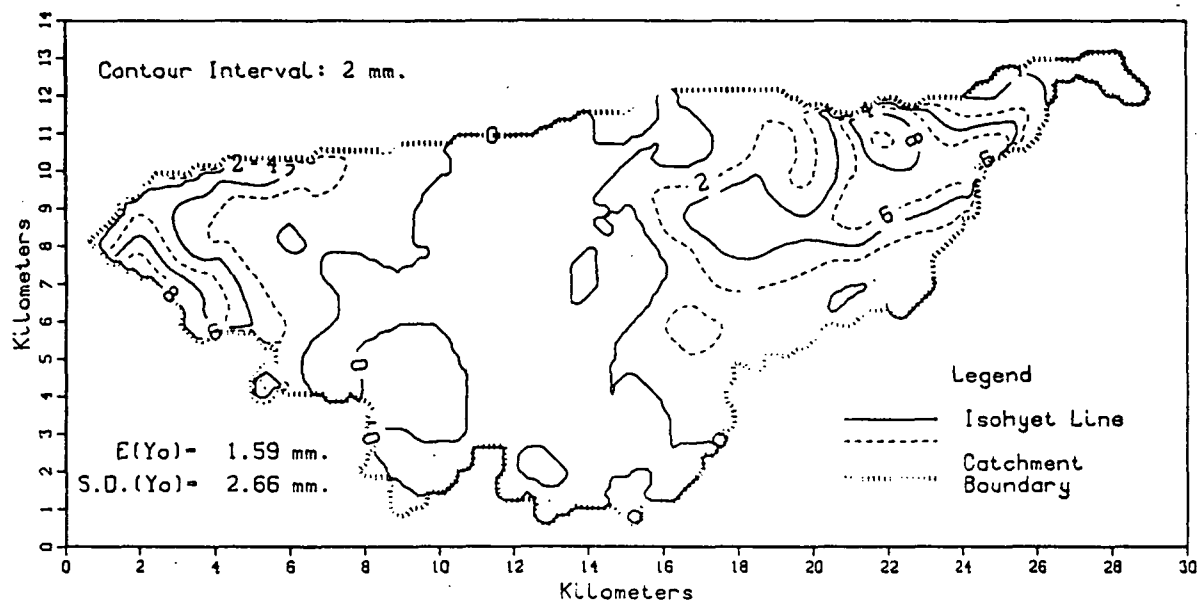
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.141$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.368	0.0	1.000	0.00	1.000
2	0.178	0.2	0.987	0.04	1.014
3	0.101	0.4	0.954	0.16	1.018
4	0.070	0.6	0.903	0.36	1.012
5	0.047	0.8	0.840	0.64	0.997
6	0.024	1.0	0.770	1.00	0.974
7	0.003	1.2	0.697	1.44	0.947
8	0.000	1.4	0.623	1.96	0.916
		1.6	0.553	2.56	0.883
		1.8	0.486	3.24	0.848
		2.0	0.426	4.00	0.814
		2.2	0.371	4.84	0.782
		2.4	0.321	5.76	0.752
		2.6	0.275	6.76	0.724
		2.8	0.232	7.84	0.695
		3.0	0.192	9.00	0.666
		3.2	0.152	10.24	0.637
		3.4	0.115	11.56	0.605
		3.6	0.077	12.96	0.573
		3.8	0.040	14.44	0.538
		4.0	0.003	16.00	0.501
		4.2	-.033	17.64	0.462
		4.4	-.068	19.36	0.423
		4.6	-.102	21.16	0.386
		4.8	-.132	23.04	0.349
		5.0	-.159	25.00	0.314
		5.2	-.182	27.04	0.277
		5.4	-.201	29.16	0.239
		5.6	-.217	31.36	0.196
		5.8	-.231	33.64	0.146
		6.0	-.244	36.00	0.096

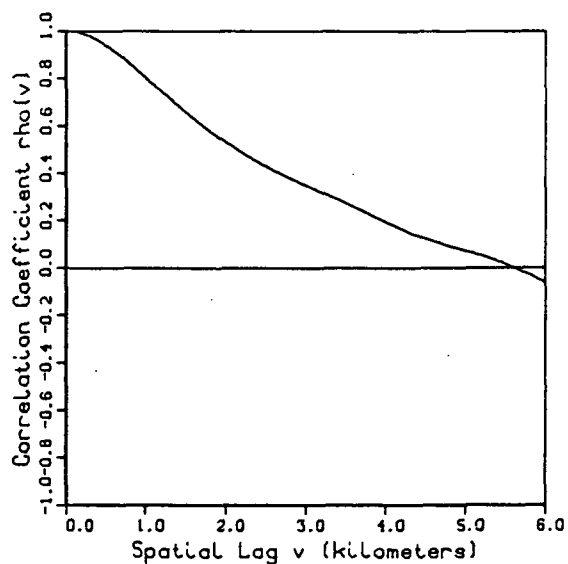
Walnut Gulch, Arizona

$A_c = 154.21 \text{ sq.km.}$

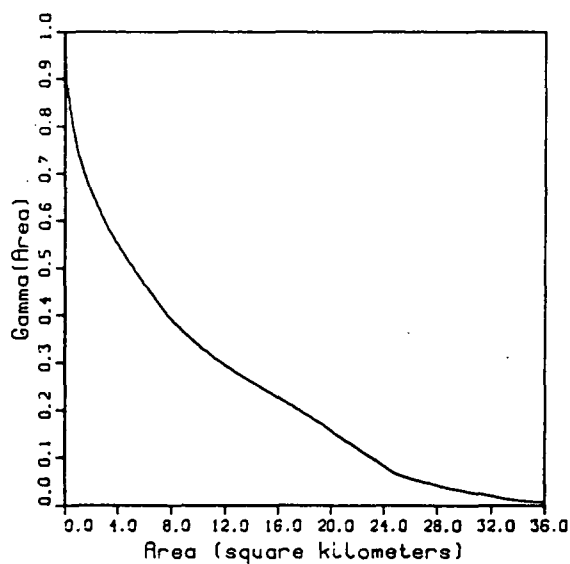
Storm Day
June 30, 1976



Spatial Correlation



Variance Function



Storm Day June 30 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.351$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.649$

Expected Value of Point Depth (mm.): $E(Y) = 1.541$

Variance of Point Depth (mm. sq.): $Var(Y) = 5.517$

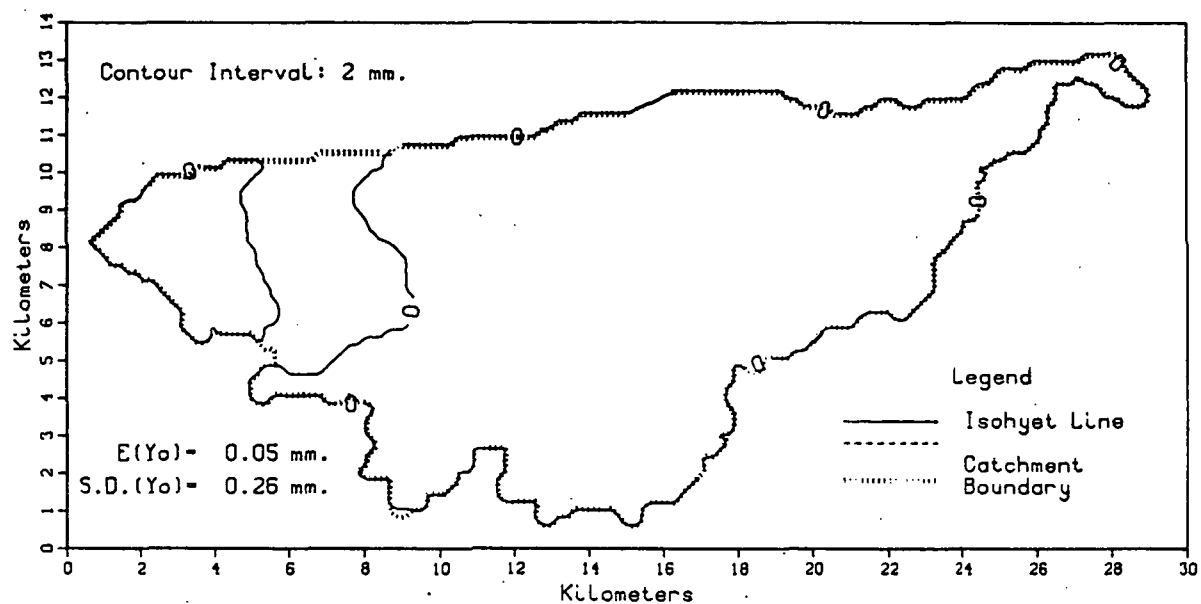
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.737$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.376	0.0	1.000	0.00	1.000
2	0.271	0.2	0.989	0.04	0.951
3	0.203	0.4	0.959	0.16	0.899
4	0.157	0.6	0.915	0.36	0.848
5	0.108	0.8	0.861	0.64	0.798
6	0.073	1.0	0.802	1.00	0.749
7	0.051	1.2	0.741	1.44	0.704
8	0.024	1.4	0.682	1.96	0.663
9	0.013	1.6	0.626	2.56	0.623
10	0.004	1.8	0.575	3.24	0.584
11	0.001	2.0	0.528	4.00	0.548
12	0.000	2.2	0.484	4.84	0.511
		2.4	0.445	5.76	0.472
		2.6	0.408	6.76	0.432
		2.8	0.375	7.84	0.394
		3.0	0.344	9.00	0.360
		3.2	0.314	10.24	0.330
		3.4	0.284	11.56	0.302
		3.6	0.253	12.96	0.276
		3.8	0.221	14.44	0.251
		4.0	0.189	16.00	0.225
		4.2	0.158	17.64	0.197
		4.4	0.131	19.36	0.168
		4.6	0.108	21.16	0.134
		4.8	0.088	23.04	0.101
		5.0	0.067	25.00	0.065
		5.2	0.048	27.04	0.048
		5.4	0.024	29.16	0.032
		5.6	-0.003	31.36	0.022
		5.8	-0.034	33.64	0.010
		6.0	-0.067	36.00	0.006

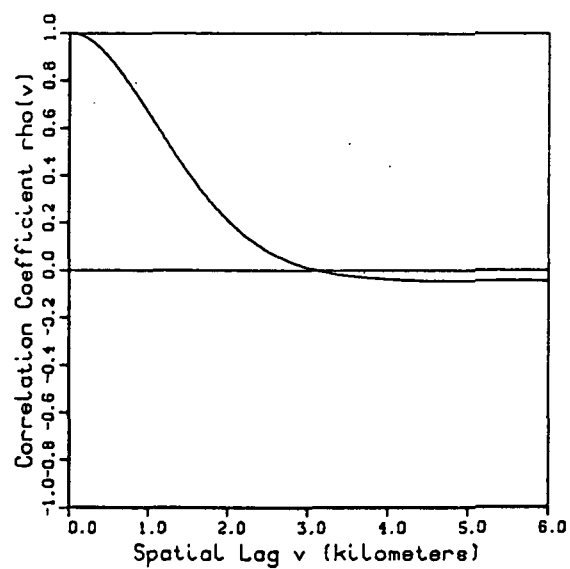
Walnut Gulch, Arizona

$A_c = 154.21$ sq.km.

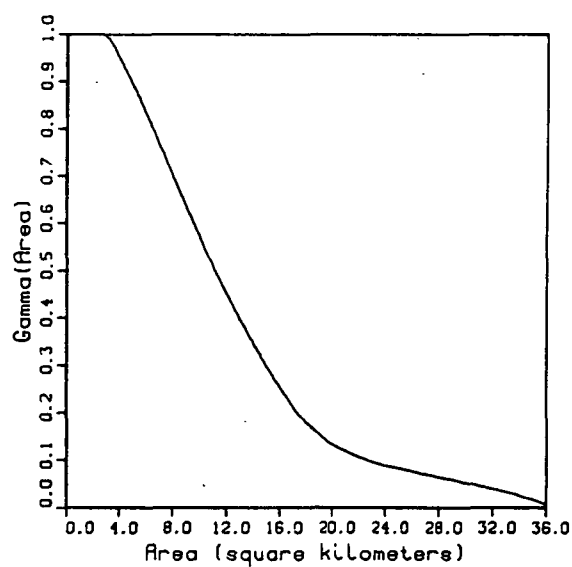
Storm Day
July 1, 1976



Spatial Correlation



Variance Function



Storm Day July 1 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.877$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.123$

Expected Value of Point Depth (mm.): $E(Y) = 0.056$

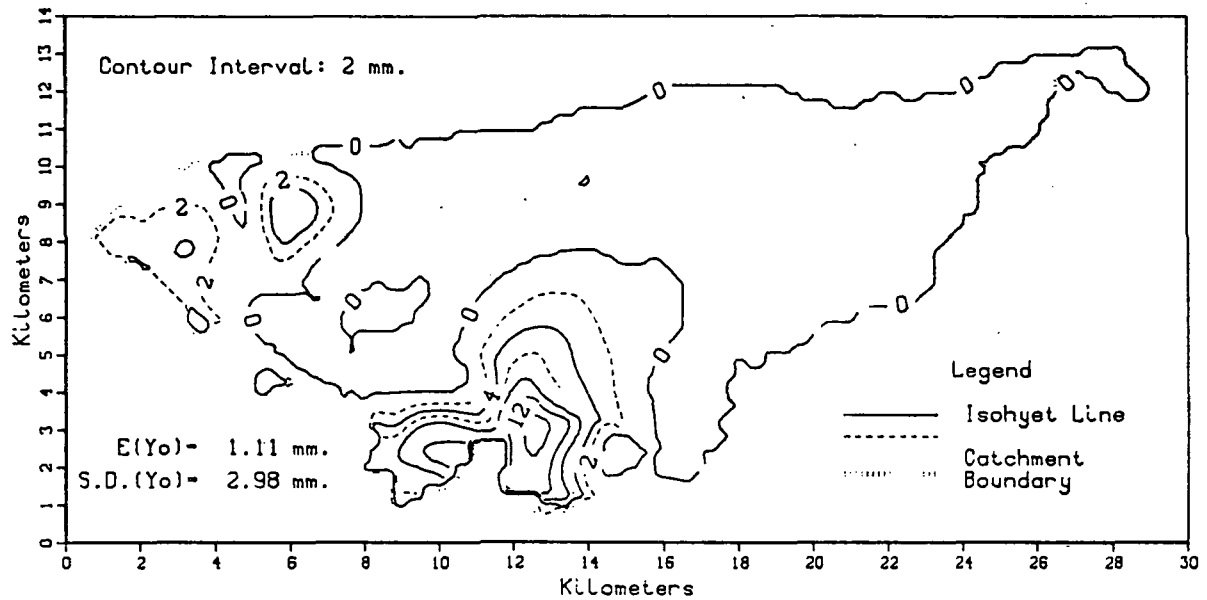
Variance of Point Depth (mm. sq.): $Var(Y) = 0.051$

Coef. of Skewness of Point Depth: $S.C.(Y) = 5.096$

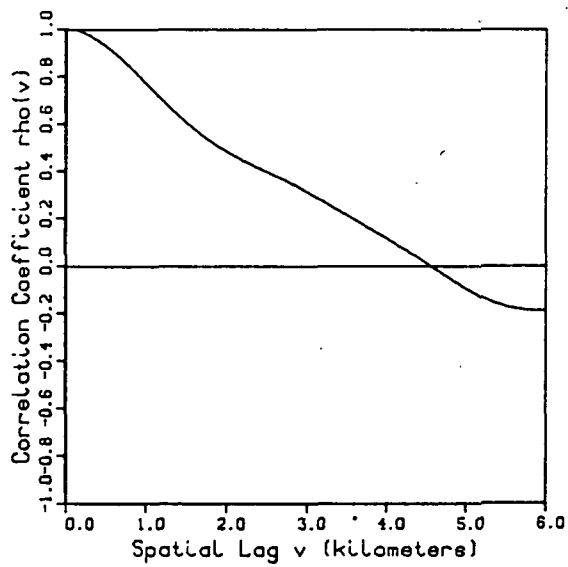
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.020	0.0	1.000	0.00	1.000
2	0.000	0.2	0.982	0.04	1.038
		0.4	0.932	0.16	1.066
		0.6	0.856	0.36	1.082
		0.8	0.764	0.64	1.085
		1.0	0.662	1.00	1.079
		1.2	0.558	1.44	1.067
		1.4	0.457	1.96	1.047
		1.6	0.363	2.56	1.020
		1.8	0.280	3.24	0.986
		2.0	0.208	4.00	0.946
		2.2	0.149	4.84	0.898
		2.4	0.100	5.76	0.843
		2.6	0.061	6.76	0.779
		2.8	0.031	7.84	0.708
		3.0	0.008	9.00	0.632
		3.2	-0.009	10.24	0.553
		3.4	-0.022	11.56	0.473
		3.6	-0.030	12.96	0.396
		3.8	-0.036	14.44	0.322
		4.0	-0.040	16.00	0.252
		4.2	-0.044	17.64	0.188
		4.4	-0.046	19.36	0.142
		4.6	-0.047	21.16	0.115
		4.8	-0.048	23.04	0.094
		5.0	-0.047	25.00	0.081
		5.2	-0.046	27.04	0.068
		5.4	-0.046	29.16	0.056
		5.6	-0.045	31.36	0.042
		5.8	-0.046	33.64	0.027
		6.0	-0.049	36.00	0.005

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

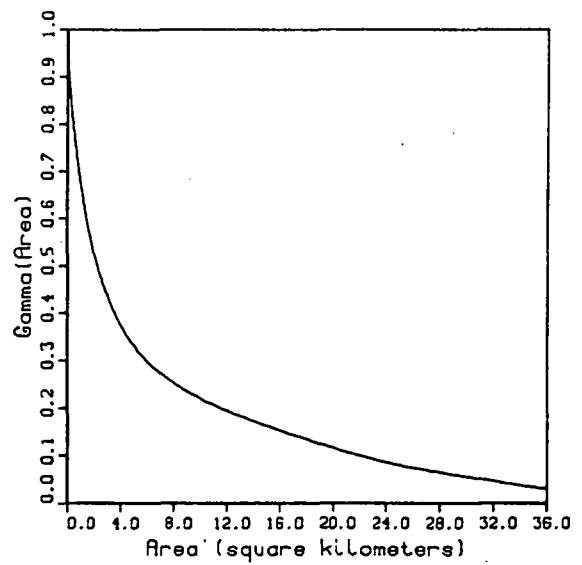
Storm Day
 July 3, 1976



Spatial Correlation



Variance Function



Storm Day July 3 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.613$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.387$

Expected Value of Point Depth (mm.): $E(Y) = 1.236$

Variance of Point Depth (mm. sq.): $Var(Y) = 8.155$

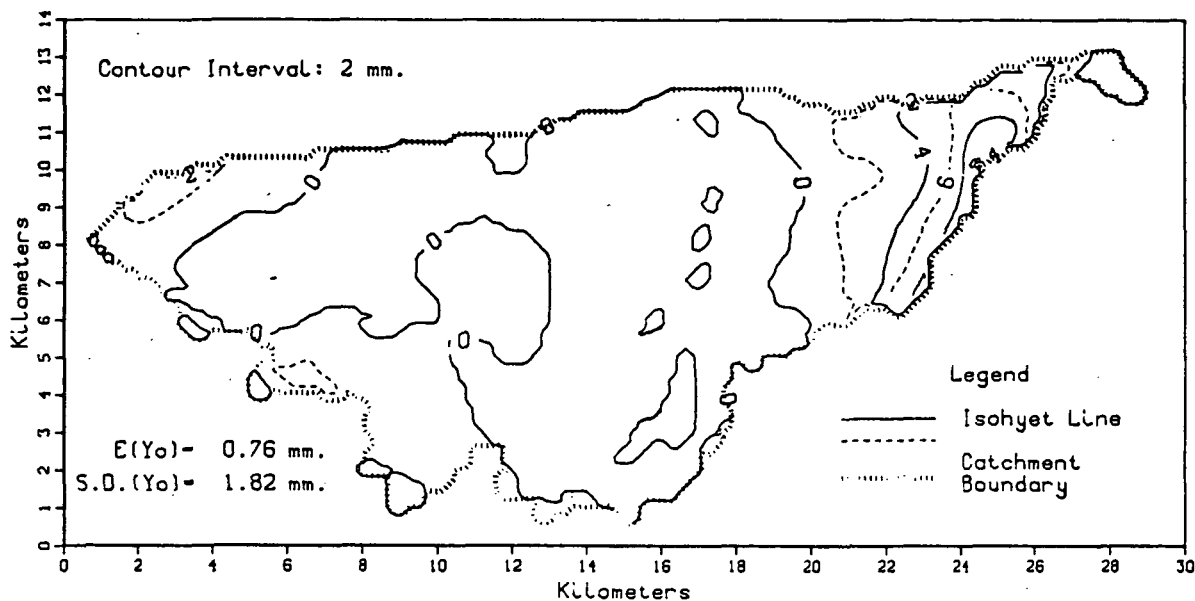
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.108$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.232	0.0	1.000	0.00	1.000
2	0.178	0.2	0.986	0.04	0.956
3	0.137	0.4	0.950	0.16	0.899
4	0.099	0.6	0.899	0.36	0.831
5	0.078	0.8	0.837	0.64	0.756
6	0.063	1.0	0.768	1.00	0.681
7	0.051	1.2	0.698	1.44	0.606
8	0.040	1.4	0.632	1.96	0.535
9	0.035	1.6	0.574	2.56	0.472
10	0.030	1.8	0.524	3.24	0.419
11	0.026	2.0	0.480	4.00	0.374
12	0.022	2.2	0.443	4.84	0.337
13	0.017	2.4	0.410	5.76	0.305
14	0.012	2.6	0.378	6.76	0.278
15	0.008	2.8	0.347	7.84	0.255
16	0.003	3.0	0.310	9.00	0.234
17	0.000	3.2	0.271	10.24	0.215
		3.4	0.232	11.56	0.198
		3.6	0.194	12.96	0.182
		3.8	0.155	14.44	0.166
		4.0	0.115	16.00	0.151
		4.2	0.075	17.64	0.136
		4.4	0.033	19.36	0.120
		4.6	-0.011	21.16	0.105
		4.8	-0.055	23.04	0.091
		5.0	-0.097	25.00	0.078
		5.2	-0.135	27.04	0.068
		5.4	-0.164	29.16	0.057
		5.6	-0.183	31.36	0.048
		5.8	-0.191	33.64	0.037
		6.0	-0.192	36.00	0.028

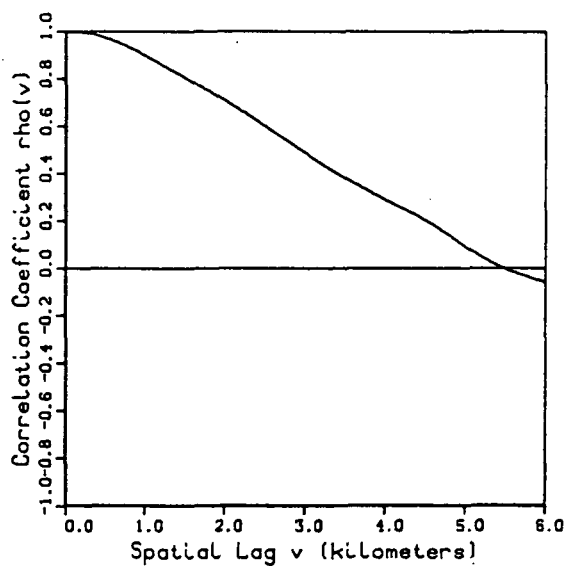
Walnut Gulch, Arizona

Ac=154.21 sq.km.

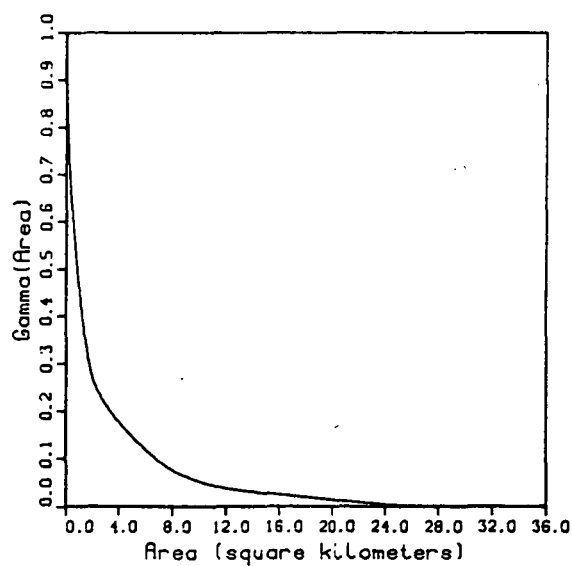
Storm Day
July 5, 1976



Spatial Correlation



Variance Function



Storm Day July 5 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.529$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.471$

Expected Value of Point Depth (mm.): $E(Y) = 0.779$

Variance of Point Depth (mm. sq.): $Var(Y) = 3.156$

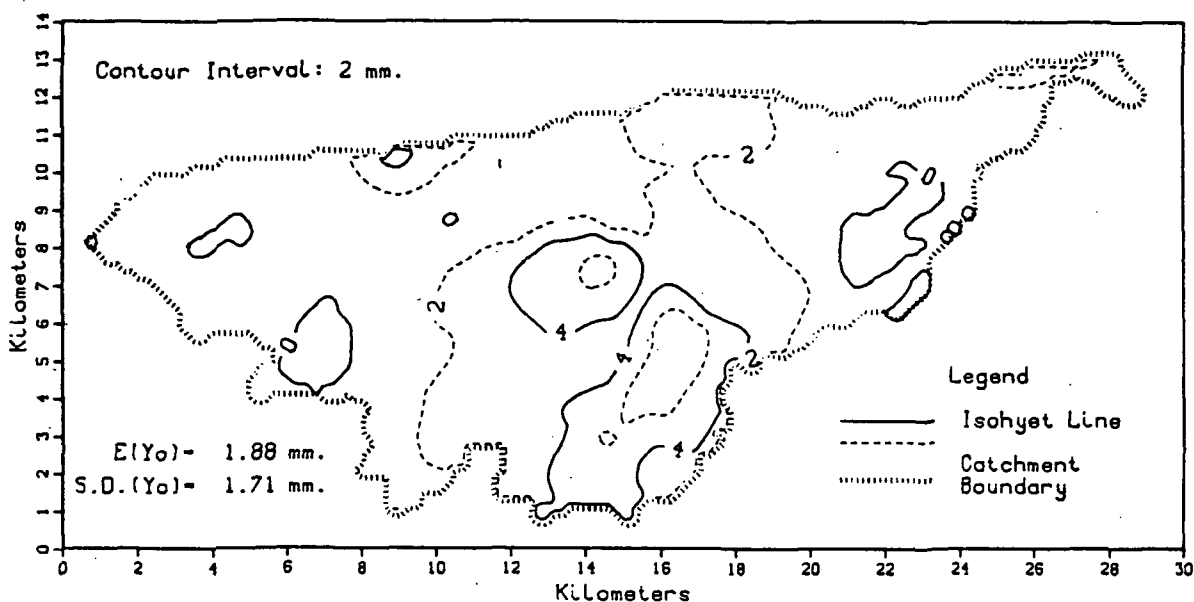
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.858$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.179	0.0	1.000	0.00	1.000
2	0.131	0.2	0.995	0.04	0.896
3	0.091	0.4	0.980	0.16	0.791
4	0.068	0.6	0.957	0.36	0.683
5	0.050	0.8	0.928	0.64	0.575
6	0.035	1.0	0.894	1.00	0.468
7	0.021	1.2	0.857	1.44	0.360
8	0.011	1.4	0.819	1.96	0.276
9	0.004	1.6	0.781	2.56	0.234
10	0.001	1.8	0.743	3.24	0.204
11	0.000	2.0	0.703	4.00	0.176
		2.2	0.662	4.84	0.150
		2.4	0.618	5.76	0.125
		2.6	0.574	6.76	0.100
		2.8	0.529	7.84	0.077
		3.0	0.483	9.00	0.061
		3.2	0.438	10.24	0.049
		3.4	0.396	11.56	0.040
		3.6	0.357	12.96	0.033
		3.8	0.321	14.44	0.028
		4.0	0.284	16.00	0.024
		4.2	0.251	17.64	0.019
		4.4	0.216	19.36	0.015
		4.6	0.178	21.16	0.009
		4.8	0.134	23.04	0.005
		5.0	0.087	25.00	0.001
		5.2	0.045	27.04	0.001
		5.4	0.007	29.16	0.000
		5.6	-0.020	31.36	0.000
		5.8	-0.043	33.64	0.000
		6.0	-0.064	36.00	0.000

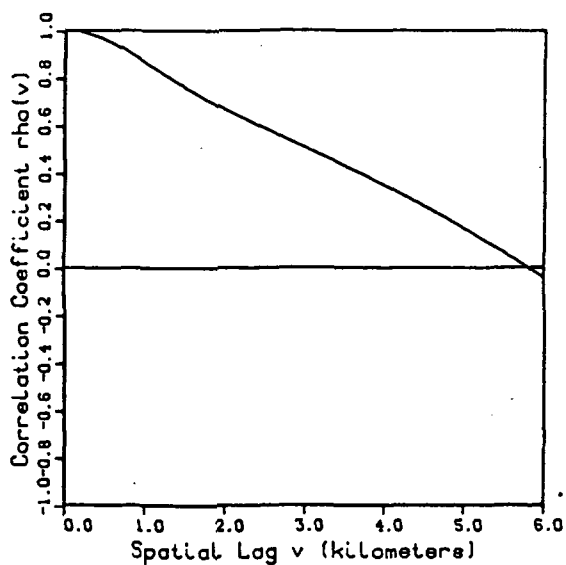
Walnut Gulch, Arizona

$A_c = 154.21 \text{ sq.km.}$

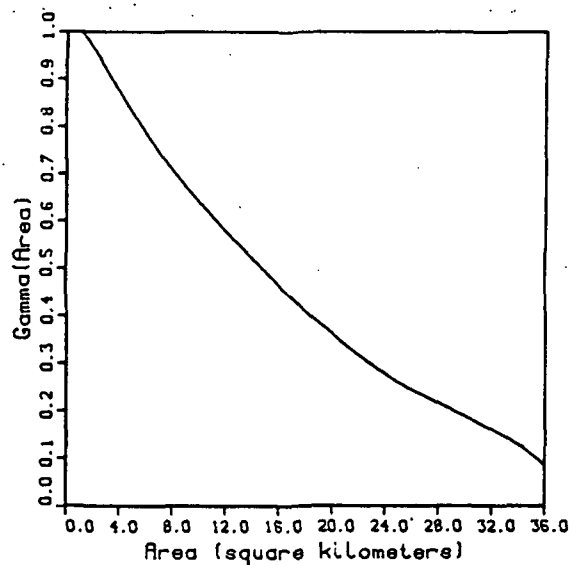
Storm Day
July 10, 1976



Spatial Correlation



Variance Function



Storm Day July 10 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.043$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.957$

Expected Value of Point Depth (mm.): $E(Y) = 2.018$

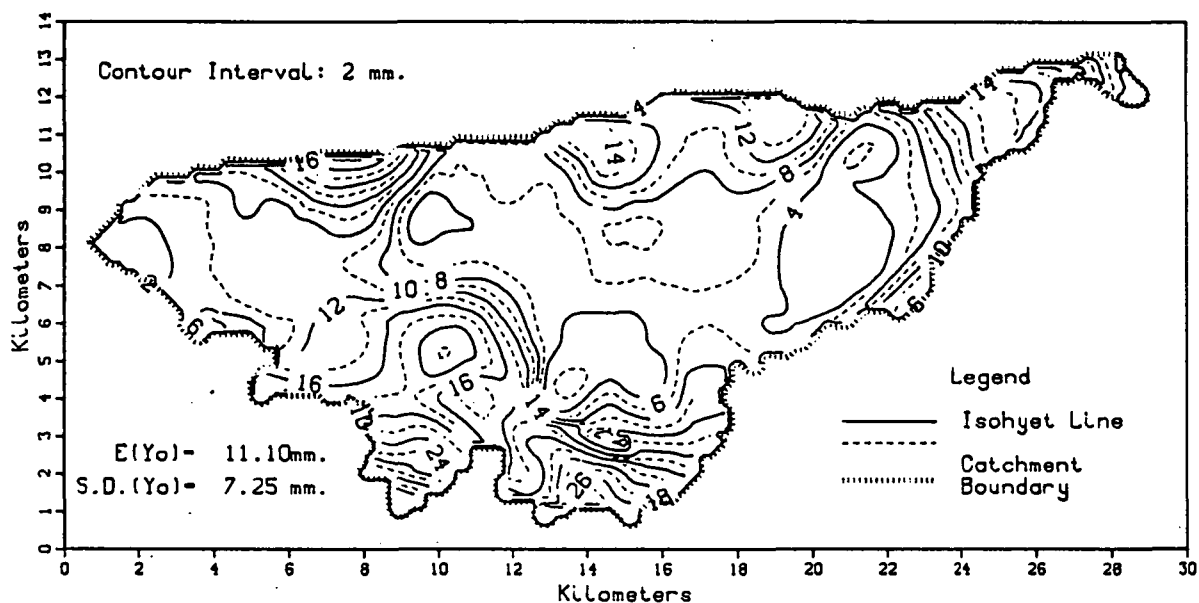
Variance of Point Depth (mm. sq.): $Var(Y) = 3.036$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.830$

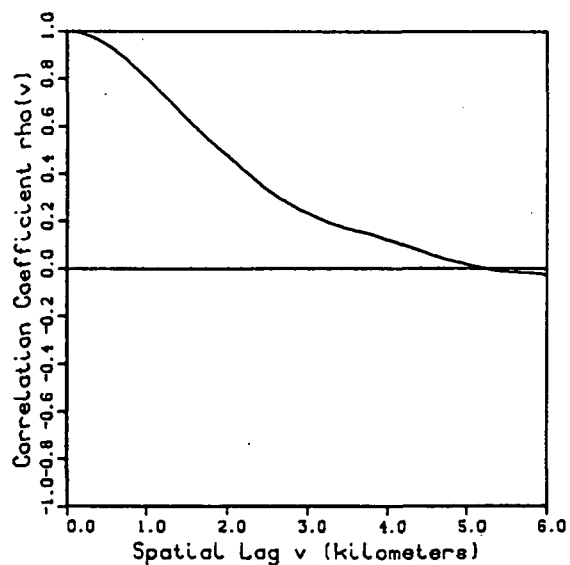
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.617	0.0	1.000	0.00	1.000
2	0.431	0.2	0.992	0.04	1.011
3	0.274	0.4	0.971	0.16	1.017
4	0.148	0.6	0.939	0.36	1.017
5	0.087	0.8	0.902	0.64	1.012
6	0.030	1.0	0.860	1.00	1.001
7	0.000	1.2	0.817	1.44	0.986
		1.4	0.775	1.96	0.965
		1.6	0.735	2.56	0.938
		1.8	0.697	3.24	0.907
		2.0	0.661	4.00	0.872
		2.2	0.628	4.84	0.834
		2.4	0.595	5.76	0.794
		2.6	0.563	6.76	0.752
		2.8	0.532	7.84	0.710
		3.0	0.500	9.00	0.669
		3.2	0.469	10.24	0.629
		3.4	0.438	11.56	0.589
		3.6	0.406	12.96	0.549
		3.8	0.374	14.44	0.508
		4.0	0.341	16.00	0.464
		4.2	0.307	17.64	0.418
		4.4	0.271	19.36	0.374
		4.6	0.236	21.16	0.334
		4.8	0.199	23.04	0.294
		5.0	0.160	25.00	0.257
		5.2	0.120	27.04	0.228
		5.4	0.080	29.16	0.197
		5.6	0.038	31.36	0.167
		5.8	-0.004	33.64	0.133
		6.0	-0.048	36.00	0.083

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

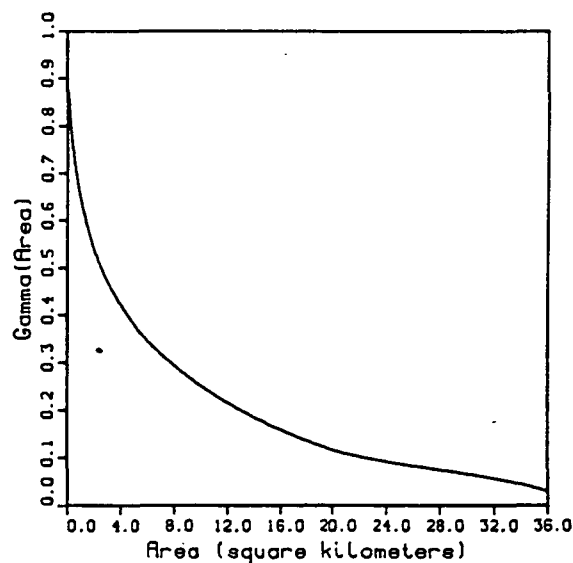
Storm Day
 July 11, 1976



Spatial Correlation



Variance Function



Storm Day July 11 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.002$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.998$

Expected Value of Point Depth (mm.): $E(Y) = 10.584$

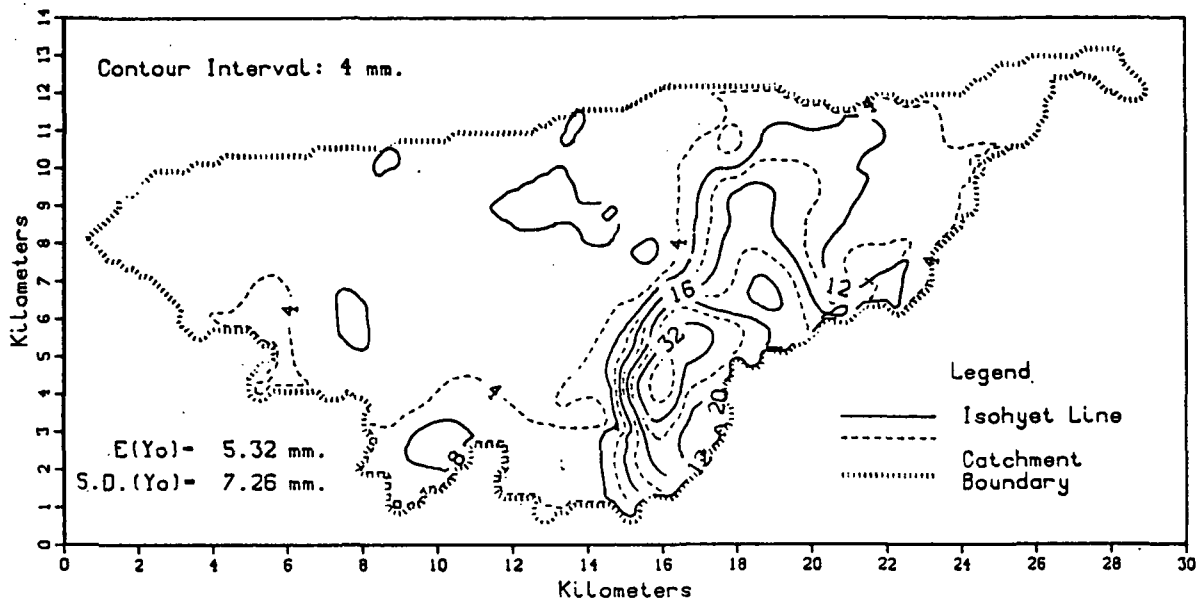
Variance of Point Depth (mm. sq.): $Var(Y) = 40.663$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.110$

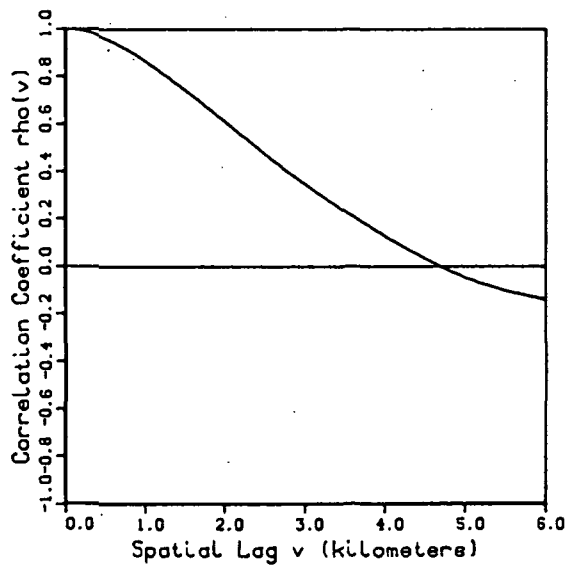
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.997	0.0	1.000	0.00	1.000
3	0.944	0.2	0.989	0.04	0.914
5	0.799	0.4	0.959	0.16	0.834
7	0.622	0.6	0.916	0.36	0.767
9	0.508	0.8	0.861	0.64	0.704
11	0.396	1.0	0.798	1.00	0.649
13	0.289	1.2	0.730	1.44	0.593
15	0.210	1.4	0.660	1.96	0.540
17	0.146	1.6	0.592	2.56	0.496
19	0.092	1.8	0.529	3.24	0.457
21	0.063	2.0	0.471	4.00	0.419
23	0.042	2.2	0.412	4.84	0.384
25	0.028	2.4	0.354	5.76	0.350
27	0.017	2.6	0.303	6.76	0.322
29	0.010	2.8	0.263	7.84	0.294
31	0.004	3.0	0.227	9.00	0.269
33	0.003	3.2	0.198	10.24	0.244
35	0.002	3.4	0.173	11.56	0.221
37	0.001	3.6	0.155	12.96	0.199
39	0.000	3.8	0.139	14.44	0.178
41	0.000	4.0	0.116	16.00	0.157
43	0.000	4.2	0.095	17.64	0.138
		4.4	0.071	19.36	0.121
		4.6	0.047	21.16	0.107
		4.8	0.029	23.04	0.096
		5.0	0.013	25.00	0.086
		5.2	-.002	27.04	0.077
		5.4	-.014	29.16	0.068
		5.6	-.019	31.36	0.058
		5.8	-.021	33.64	0.046
		6.0	-.032	36.00	0.028

Walnut Gulch, Arizona
Ac=154.21 sq.km.

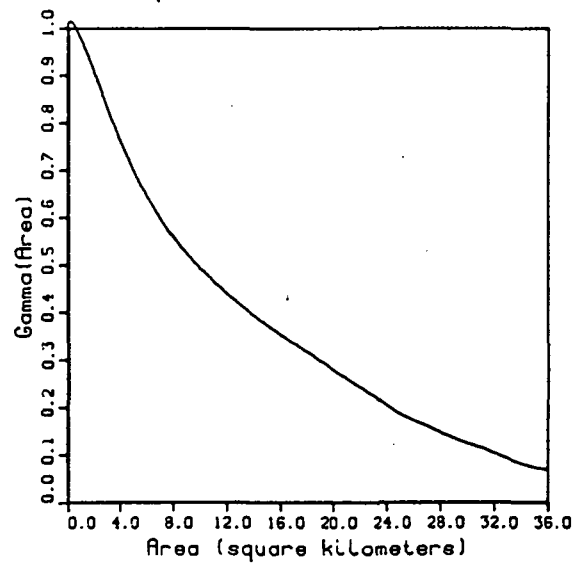
Storm Day
July 12, 1976



Spatial Correlation



Variance Function



Storm Day July 12 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.027$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.973$

Expected Value of Point Depth (mm.): $E(Y) = 6.179$

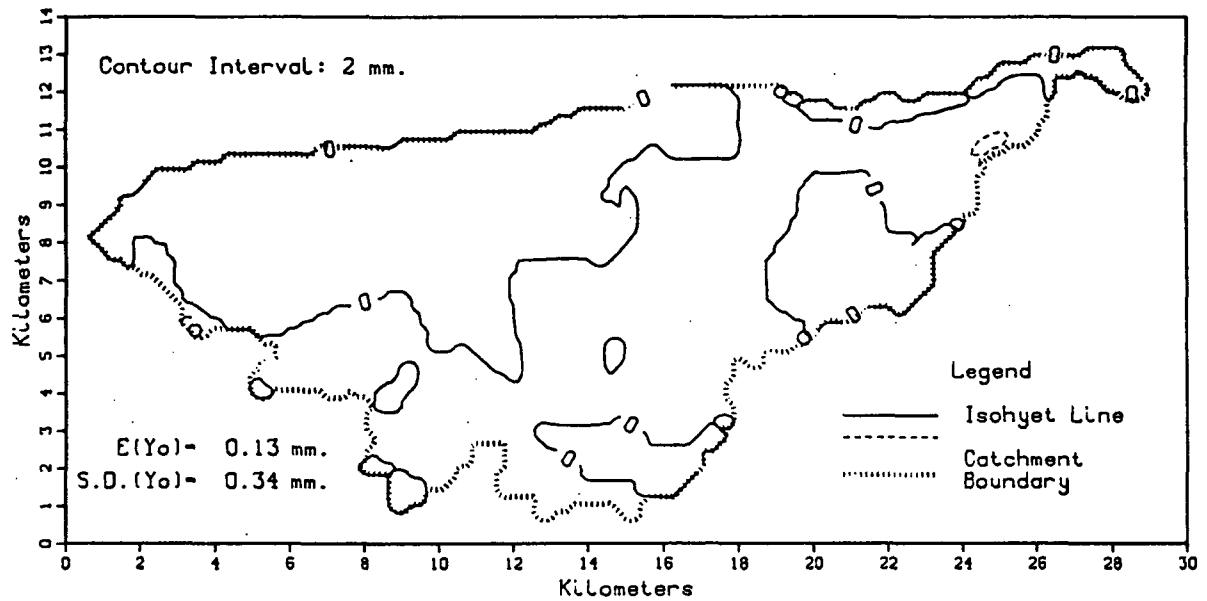
Variance of Point Depth (mm. sq.): $Var(Y) = 63.370$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.853$

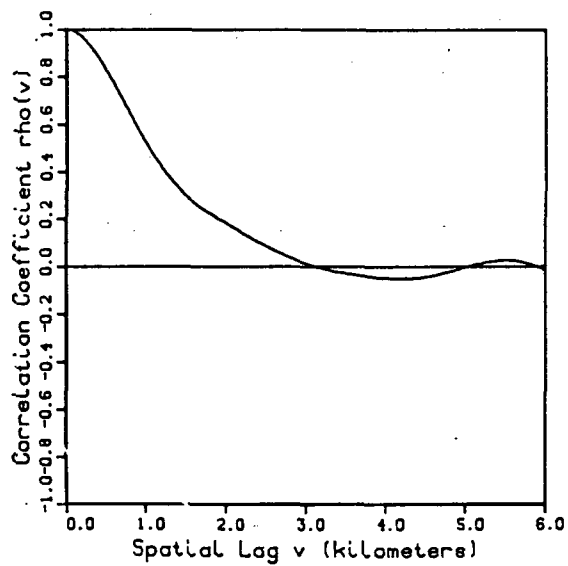
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.697	0.0	1.000	0.00	1.000
2	0.574	0.2	0.992	0.04	1.011
3	0.503	0.4	0.971	0.16	1.015
4	0.437	0.6	0.941	0.36	1.011
5	0.355	0.8	0.903	0.64	0.998
6	0.309	1.0	0.860	1.00	0.977
7	0.274	1.2	0.812	1.44	0.949
8	0.240	1.4	0.763	1.96	0.912
9	0.214	1.6	0.712	2.56	0.866
10	0.193	1.8	0.659	3.24	0.814
11	0.178	2.0	0.606	4.00	0.760
12	0.167	2.2	0.551	4.84	0.706
13	0.156	2.4	0.497	5.76	0.655
14	0.145	2.6	0.443	6.76	0.606
15	0.136	2.8	0.391	7.84	0.562
16	0.127	3.0	0.342	9.00	0.521
17	0.118	3.2	0.295	10.24	0.484
18	0.107	3.4	0.249	11.56	0.448
19	0.100	3.6	0.206	12.96	0.414
20	0.094	3.8	0.165	14.44	0.382
21	0.086	4.0	0.124	16.00	0.351
22	0.077	4.2	0.085	17.64	0.320
23	0.067	4.4	0.047	19.36	0.288
24	0.059	4.6	0.011	21.16	0.255
25	0.050	4.8	-.022	23.04	0.221
26	0.044	5.0	-.052	25.00	0.184
27	0.039	5.2	-.077	27.04	0.158
28	0.035	5.4	-.098	29.16	0.131
29	0.030	5.6	-.116	31.36	0.110
30	0.026	5.8	-.131	33.64	0.084
31	0.022	6.0	-.146	36.00	0.068
32	0.017				
33	0.011				
34	0.008				
35	0.006				
36	0.004				
37	0.002				
38	0.000				

Walnut Gulch, Arizona
Ac=154.21 sq.km.

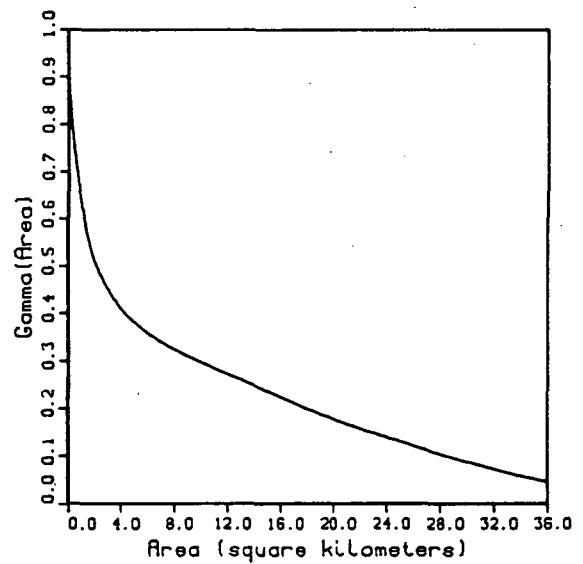
Storm Day
July 14, 1976



Spatial Correlation



Variance Function



Storm Day July 14 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.473$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.527$

Expected Value of Point Depth (mm.): $E(Y) = 0.168$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.082$

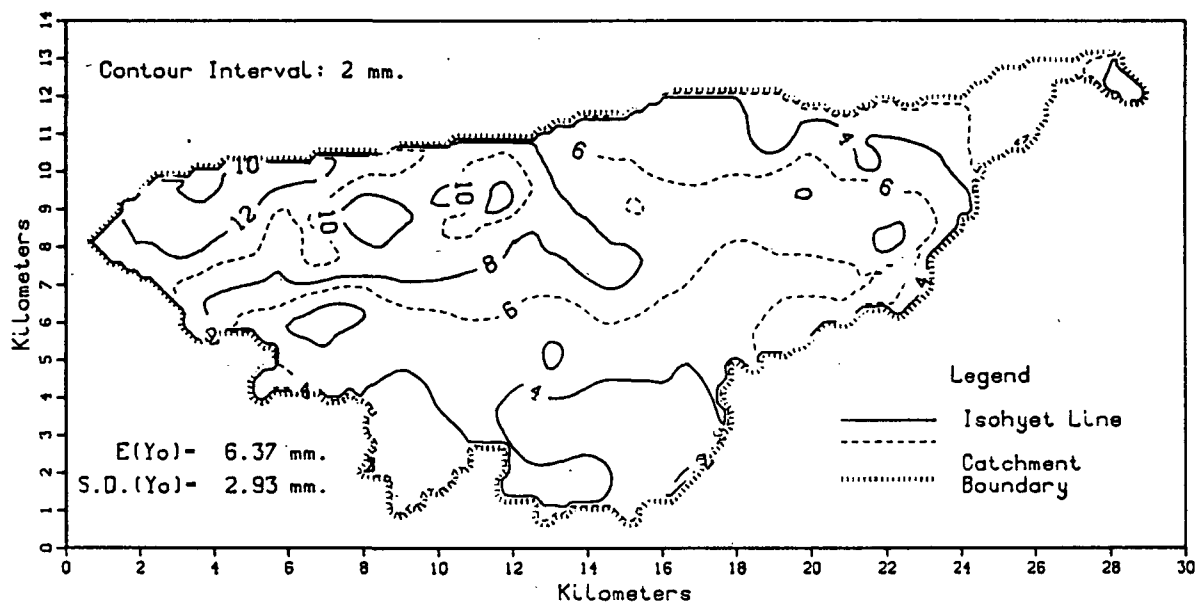
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.754$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.014	0.0	1.000	0.00	1.000
2	0.003	0.2	0.967	0.04	0.935
3	0.000	0.4	0.883	0.16	0.863
		0.6	0.769	0.36	0.783
		0.8	0.642	0.64	0.705
		1.0	0.519	1.00	0.635
		1.2	0.412	1.44	0.570
		1.4	0.328	1.96	0.513
		1.6	0.266	2.56	0.473
		1.8	0.219	3.24	0.439
		2.0	0.181	4.00	0.408
		2.2	0.139	4.84	0.383
		2.4	0.101	5.76	0.361
		2.6	0.065	6.76	0.341
		2.8	0.034	7.84	0.324
		3.0	0.009	9.00	0.308
		3.2	-.011	10.24	0.292
		3.4	-.026	11.56	0.275
		3.6	-.037	12.96	0.259
		3.8	-.046	14.44	0.241
		4.0	-.051	16.00	0.222
		4.2	-.053	17.64	0.202
		4.4	-.049	19.36	0.183
		4.6	-.037	21.16	0.165
		4.8	-.020	23.04	0.147
		5.0	-.001	25.00	0.129
		5.2	0.016	27.04	0.111
		5.4	0.026	29.16	0.093
		5.6	0.025	31.36	0.076
		5.8	0.010	33.64	0.059
		6.0	-.016	36.00	0.046

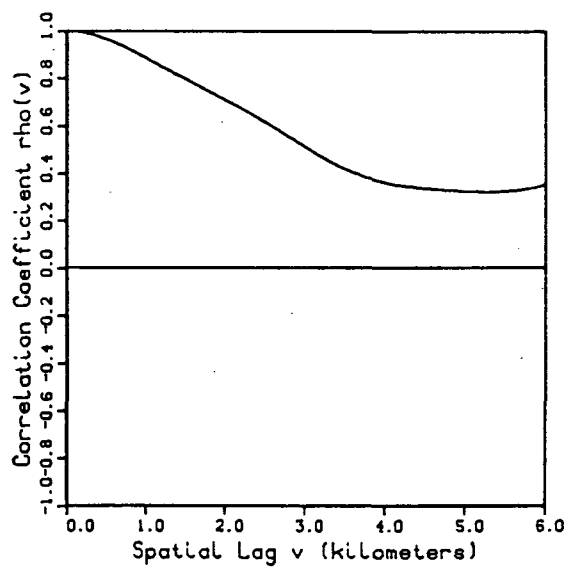
Walnut Gulch, Arizona

Ac=154.21 sq.km.

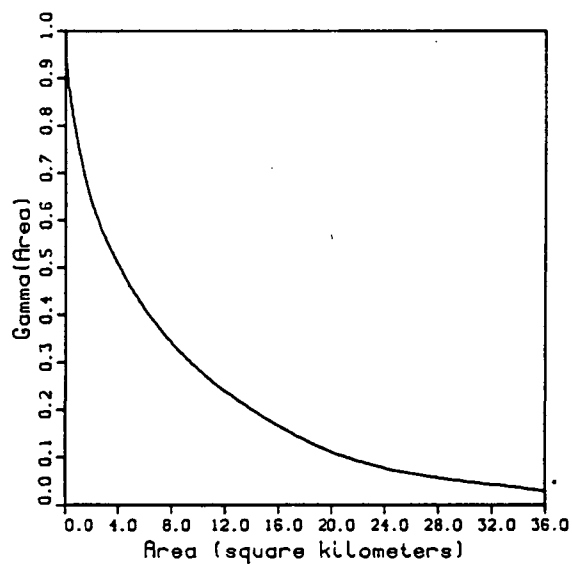
Storm Day
July 15, 1976



Spatial Correlation



Variance Function



Storm Day July 15 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 6.229$

Variance of Point Depth (mm. sq.): $Var(Y) = 7.180$

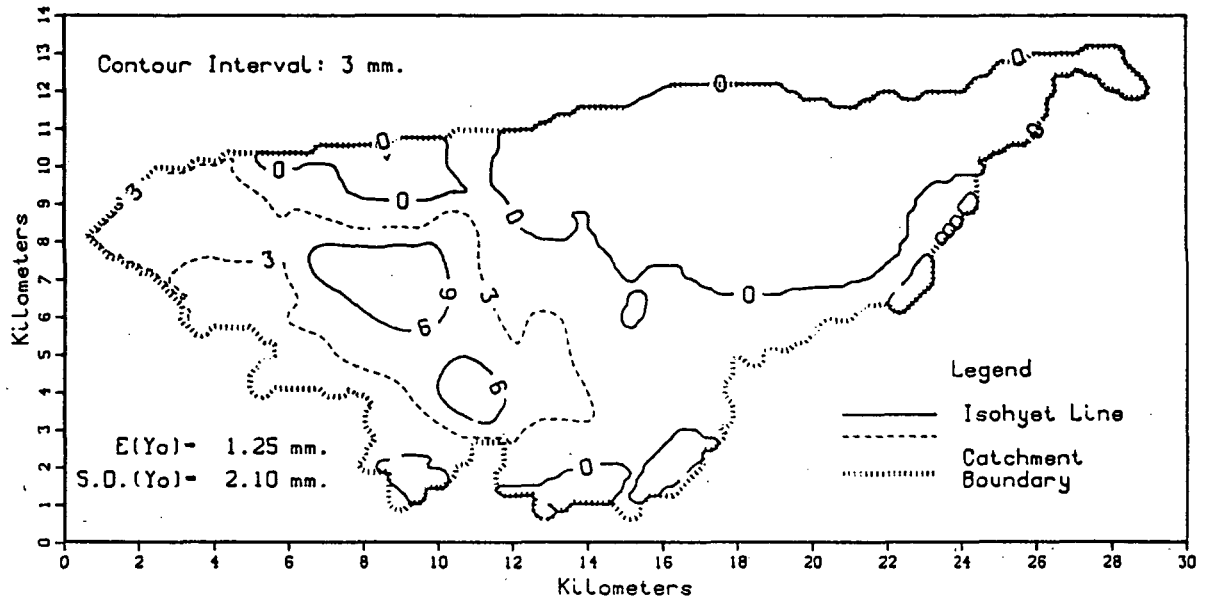
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.646$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.993	0.0	1.000	0.00	1.000
2	0.976	0.2	0.993	0.04	0.959
3	0.937	0.4	0.975	0.16	0.913
4	0.802	0.6	0.949	0.36	0.862
5	0.620	0.8	0.917	0.64	0.808
6	0.476	1.0	0.881	1.00	0.752
7	0.329	1.2	0.845	1.44	0.694
8	0.237	1.4	0.809	1.96	0.640
9	0.157	1.6	0.774	2.56	0.593
10	0.110	1.8	0.739	3.24	0.546
11	0.076	2.0	0.704	4.00	0.502
12	0.044	2.2	0.668	4.84	0.459
13	0.006	2.4	0.631	5.76	0.418
14	0.000	2.6	0.591	6.76	0.380
		2.8	0.549	7.84	0.343
		3.0	0.507	9.00	0.308
		3.2	0.466	10.24	0.276
		3.4	0.430	11.56	0.246
		3.6	0.400	12.96	0.218
		3.8	0.376	14.44	0.190
		4.0	0.357	16.00	0.164
		4.2	0.345	17.64	0.139
		4.4	0.337	19.36	0.117
		4.6	0.331	21.16	0.099
		4.8	0.326	23.04	0.083
		5.0	0.321	25.00	0.069
		5.2	0.320	27.04	0.060
		5.4	0.321	29.16	0.051
		5.6	0.327	31.36	0.044
		5.8	0.337	33.64	0.036
		6.0	0.353	36.00	0.027

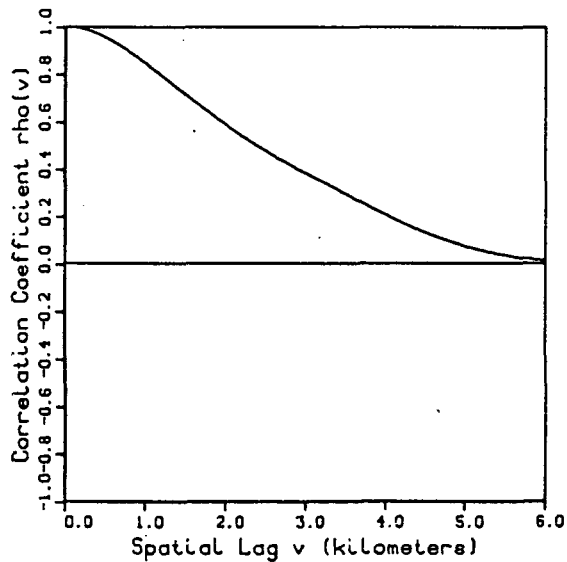
Walnut Gulch, Arizona

Ac=154.21 sq.km.

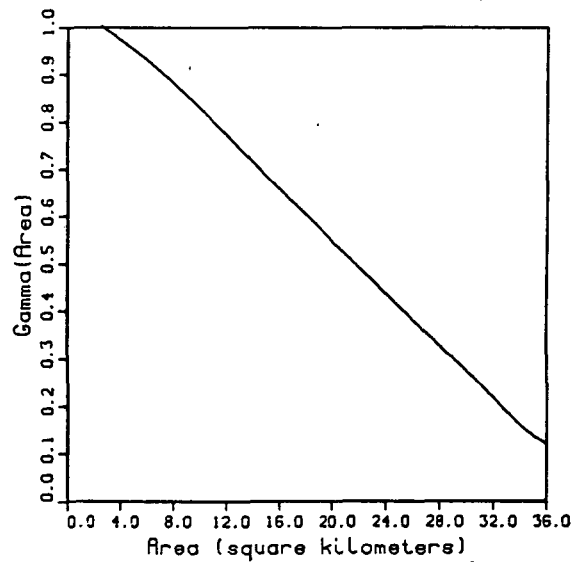
Storm Day
July 16, 1976



Spatial Correlation



Variance Function



Storm Day July 16, 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.388$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.612$

Expected Value of Point Depth (mm.): $E(Y) = 1.544$

Variance of Point Depth (mm. sq.): $Var(Y) = 4.599$

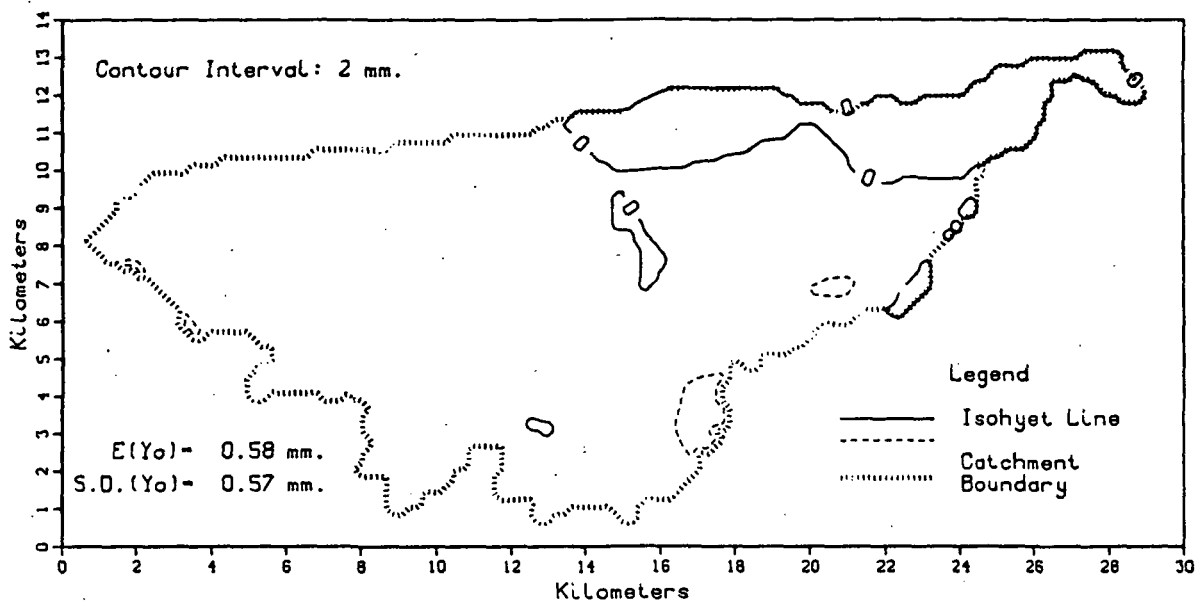
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.247$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.385	0.0	1.000	0.00	1.000
2	0.319	0.2	0.992	0.04	1.015
3	0.245	0.4	0.969	0.16	1.026
4	0.177	0.6	0.934	0.36	1.032
5	0.108	0.8	0.891	0.64	1.032
6	0.055	1.0	0.842	1.00	1.029
7	0.025	1.2	0.790	1.44	1.023
8	0.003	1.4	0.737	1.96	1.014
9	0.000	1.6	0.683	2.56	1.002
		1.8	0.632	3.24	0.987
		2.0	0.583	4.00	0.971
		2.2	0.536	4.84	0.953
		2.4	0.493	5.76	0.933
		2.6	0.453	6.76	0.910
		2.8	0.415	7.84	0.883
		3.0	0.379	9.00	0.853
		3.2	0.344	10.24	0.820
		3.4	0.309	11.56	0.782
		3.6	0.273	12.96	0.742
		3.8	0.238	14.44	0.699
		4.0	0.204	16.00	0.655
		4.2	0.172	17.64	0.610
		4.4	0.142	19.36	0.563
		4.6	0.116	21.16	0.513
		4.8	0.093	23.04	0.461
		5.0	0.072	25.00	0.407
		5.2	0.054	27.04	0.351
		5.4	0.039	29.16	0.294
		5.6	0.027	31.36	0.235
		5.8	0.018	33.64	0.168
		6.0	0.012	36.00	0.119

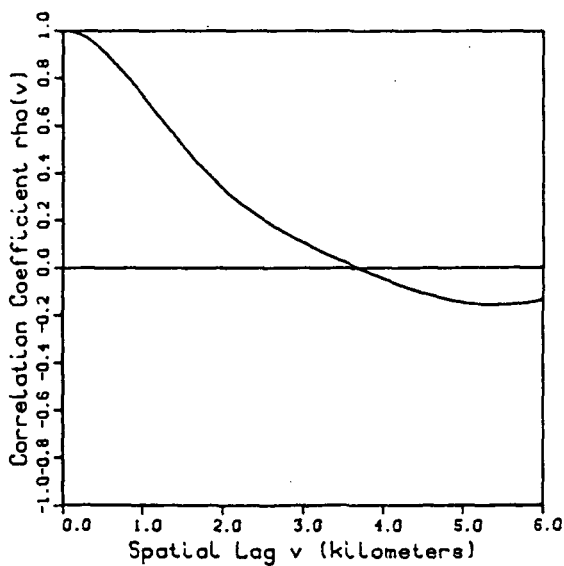
Walnut Gulch, Arizona

Ac=154.21 sq.km.

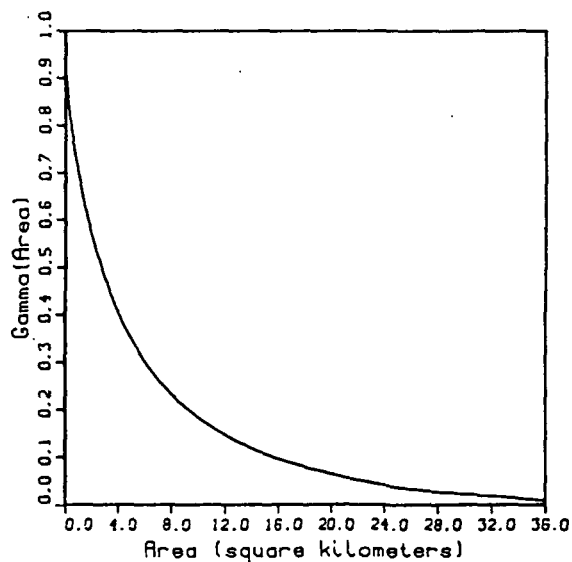
Storm Day
July 17, 1976



Spatial Correlation



Variance Function



Storm Day July 17 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.127$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.873$

Expected Value of Point Depth (mm.): $E(Y) = 0.655$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.302$

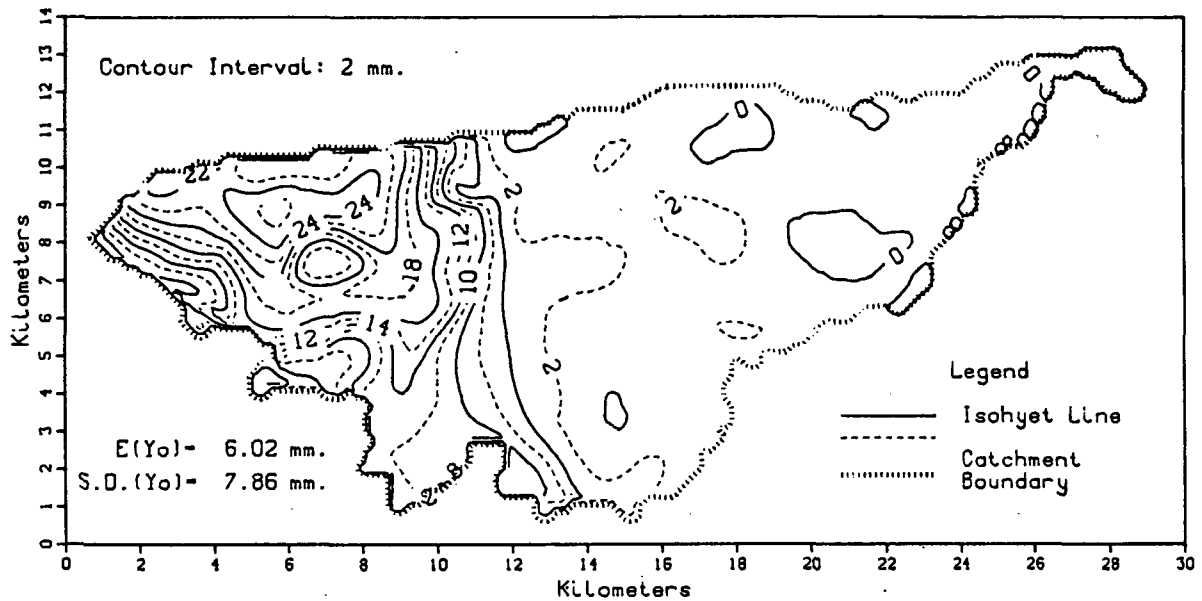
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.813$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.246	0.0	1.000	0.00	1.000
2	0.016	0.2	0.984	0.04	0.944
3	0.000	0.4	0.942	0.16	0.885
		0.6	0.879	0.36	0.825
		0.8	0.804	0.64	0.764
		1.0	0.721	1.00	0.700
		1.2	0.636	1.44	0.636
		1.4	0.551	1.96	0.573
		1.6	0.470	2.56	0.514
		1.8	0.396	3.24	0.457
		2.0	0.330	4.00	0.404
		2.2	0.273	4.84	0.355
		2.4	0.223	5.76	0.310
		2.6	0.178	6.76	0.270
		2.8	0.138	7.84	0.234
		3.0	0.102	9.00	0.203
		3.2	0.068	10.24	0.176
		3.4	0.037	11.56	0.152
		3.6	0.007	12.96	0.131
		3.8	-.022	14.44	0.112
		4.0	-.050	16.00	0.095
		4.2	-.077	17.64	0.080
		4.4	-.101	19.36	0.067
		4.6	-.121	21.16	0.055
		4.8	-.138	23.04	0.045
		5.0	-.151	25.00	0.035
		5.2	-.159	27.04	0.028
		5.4	-.161	29.16	0.023
		5.6	-.157	31.36	0.019
		5.8	-.149	33.64	0.013
		6.0	-.137	36.00	0.008

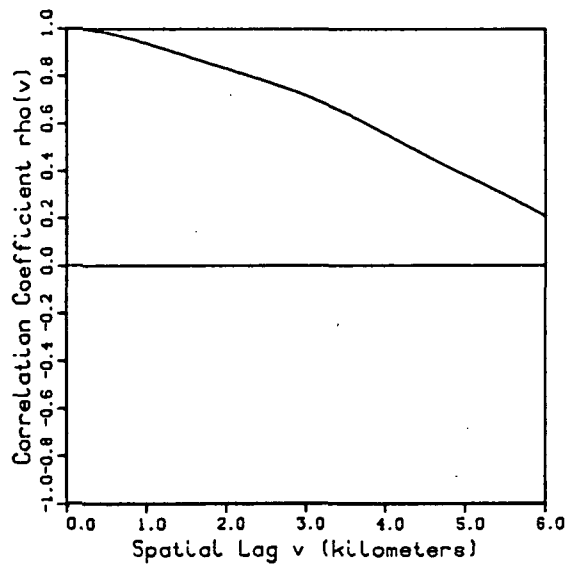
Walnut Gulch, Arizona

Ac=154.21 sq.km.

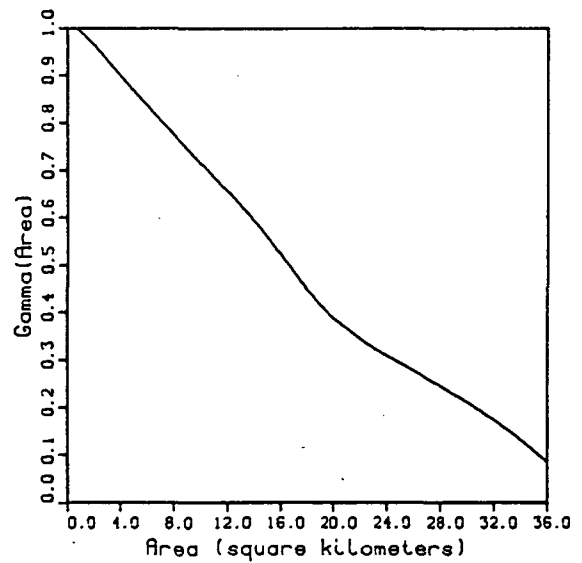
Storm Day
July 18, 1976



Spatial Correlation



Variance Function



Storm Day July 18 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.048$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.952$

Expected Value of Point Depth (mm.): $E(Y) = 6.293$

Variance of Point Depth (mm. sq.): $Var(Y) = 56.707$

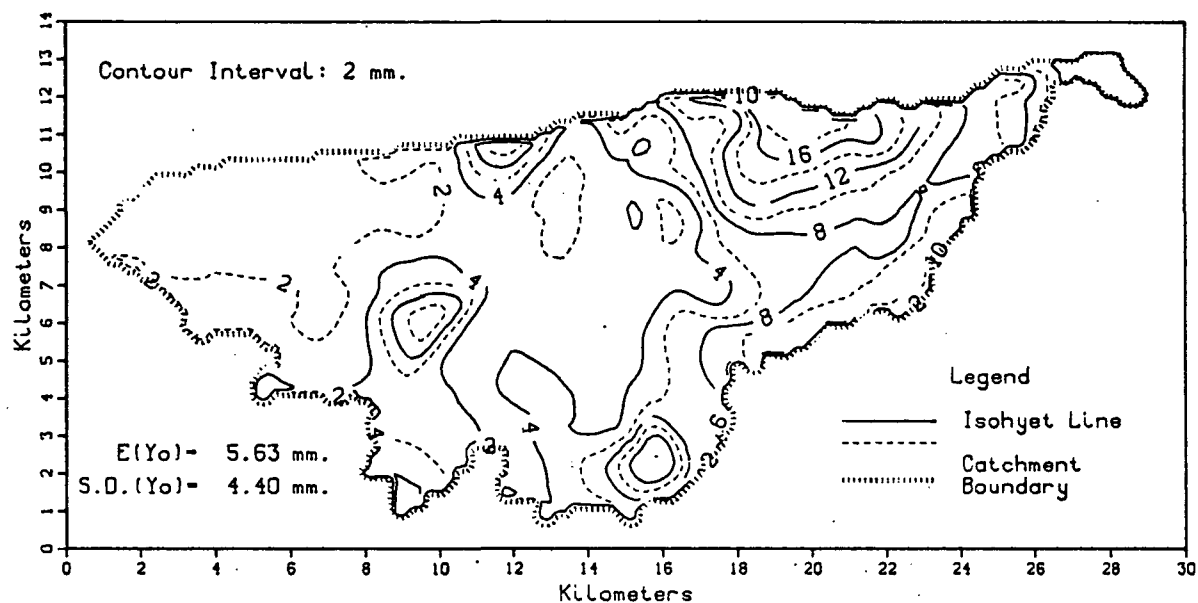
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.162$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
Acw/Ac (Y≥y)					
1	0.717	0.0	1.000	0.00	1.000
2	0.495	0.2	0.996	0.04	1.004
3	0.413	0.4	0.987	0.16	1.006
4	0.392	0.6	0.973	0.36	1.005
5	0.372	0.8	0.955	0.64	1.000
6	0.354	1.0	0.935	1.00	0.991
7	0.337	1.2	0.914	1.44	0.979
8	0.317	1.4	0.892	1.96	0.964
9	0.295	1.6	0.871	2.56	0.945
10	0.266	1.8	0.850	3.24	0.922
11	0.242	2.0	0.828	4.00	0.897
12	0.224	2.2	0.807	4.84	0.870
13	0.209	2.4	0.786	5.76	0.841
14	0.194	2.6	0.764	6.76	0.811
15	0.179	2.8	0.740	7.84	0.778
16	0.163	3.0	0.715	9.00	0.743
17	0.146	3.2	0.687	10.24	0.706
18	0.122	3.4	0.657	11.56	0.667
19	0.102	3.6	0.625	12.96	0.625
20	0.092	3.8	0.590	14.44	0.577
21	0.077	4.0	0.554	16.00	0.521
22	0.062	4.2	0.518	17.64	0.458
23	0.047	4.4	0.481	19.36	0.402
24	0.029	4.6	0.445	21.16	0.361
25	0.014	4.8	0.411	23.04	0.322
26	0.004	5.0	0.378	25.00	0.291
27	0.000	5.2	0.345	27.04	0.258
28	0.000	5.4	0.311	29.16	0.223
		5.6	0.277	31.36	0.185
		5.8	0.242	33.64	0.139
		6.0	0.204	36.00	0.083

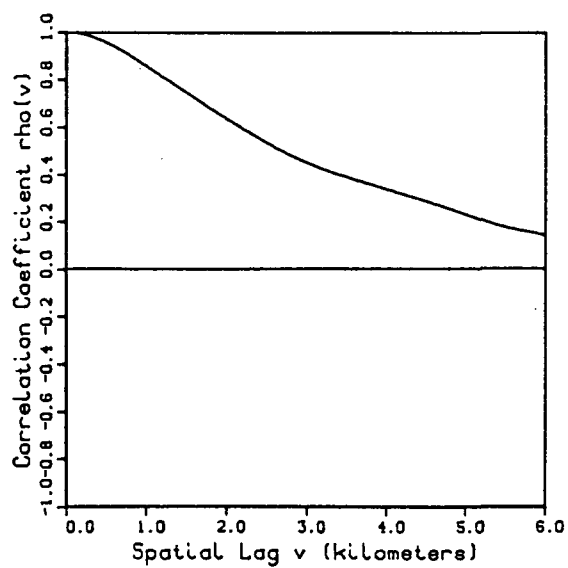
Walnut Gulch, Arizona

$A_c = 154.21$ sq.km.

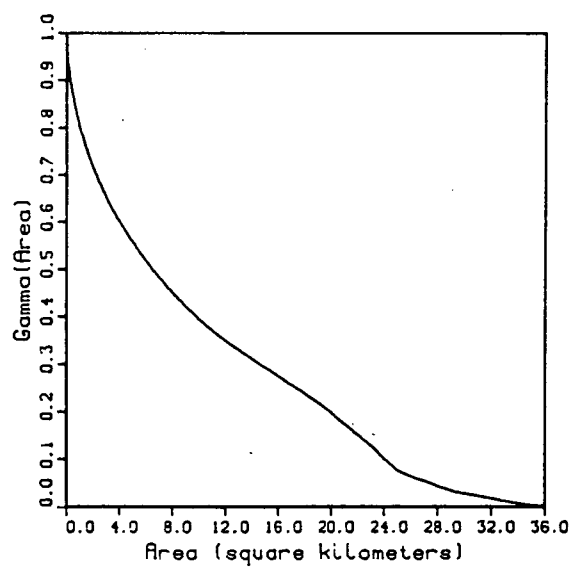
Storm Day
July 19, 1976



Spatial Correlation



Variance Function



Storm Day July 19 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.007$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.993$

Expected Value of Point Depth (mm.): $E(Y) = 5.503$

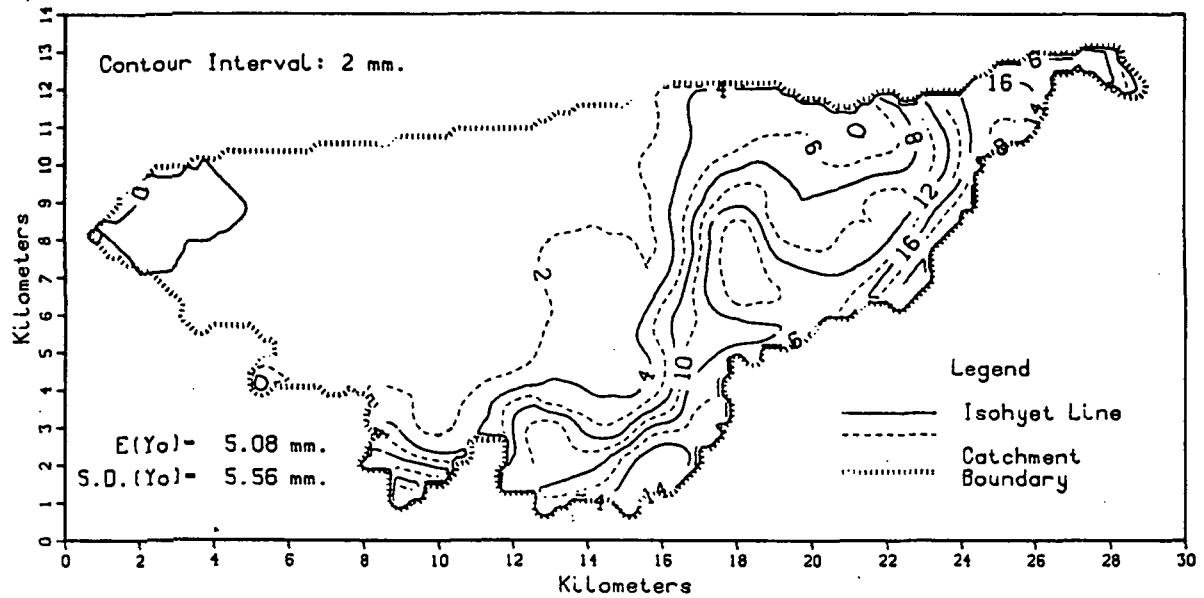
Variance of Point Depth (mm. sq.): $Var(Y) = 15.822$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.155$

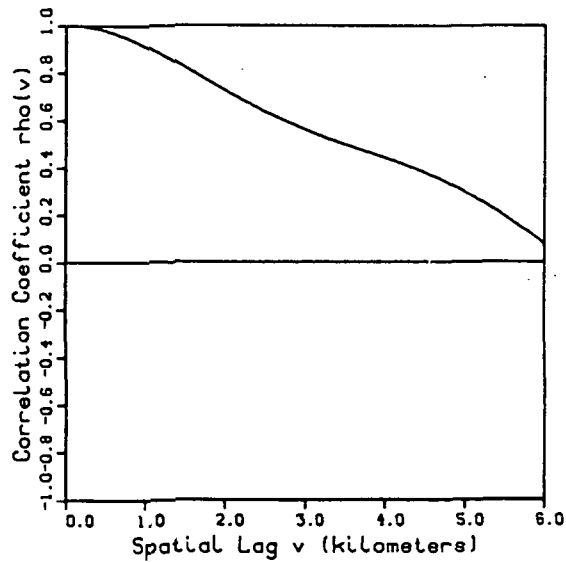
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.965	0.0	1.000	0.00	1.000
2	0.832	0.2	0.992	0.04	0.967
3	0.653	0.4	0.969	0.16	0.928
4	0.522	0.6	0.937	0.36	0.887
5	0.427	0.8	0.897	0.64	0.844
6	0.366	1.0	0.854	1.00	0.802
7	0.310	1.2	0.809	1.44	0.760
8	0.234	1.4	0.764	1.96	0.718
9	0.181	1.6	0.719	2.56	0.676
10	0.137	1.8	0.675	3.24	0.636
11	0.100	2.0	0.632	4.00	0.598
12	0.069	2.2	0.590	4.84	0.561
13	0.056	2.4	0.550	5.76	0.525
14	0.042	2.6	0.512	6.76	0.488
15	0.032	2.8	0.477	7.84	0.452
16	0.023	3.0	0.447	9.00	0.419
17	0.017	3.2	0.420	10.24	0.386
18	0.012	3.4	0.397	11.56	0.357
19	0.007	3.6	0.376	12.96	0.328
20	0.001	3.8	0.355	14.44	0.301
21	0.000	4.0	0.335	16.00	0.272
		4.2	0.314	17.64	0.242
		4.4	0.294	19.36	0.209
		4.6	0.273	21.16	0.170
		4.8	0.251	23.04	0.126
		5.0	0.228	25.00	0.075
		5.2	0.204	27.04	0.053
		5.4	0.183	29.16	0.032
		5.6	0.167	31.36	0.020
		5.8	0.154	33.64	0.007
		6.0	0.140	36.00	0.001

Walnut Gulch, Arizona
Ac=154.21 sq.km.

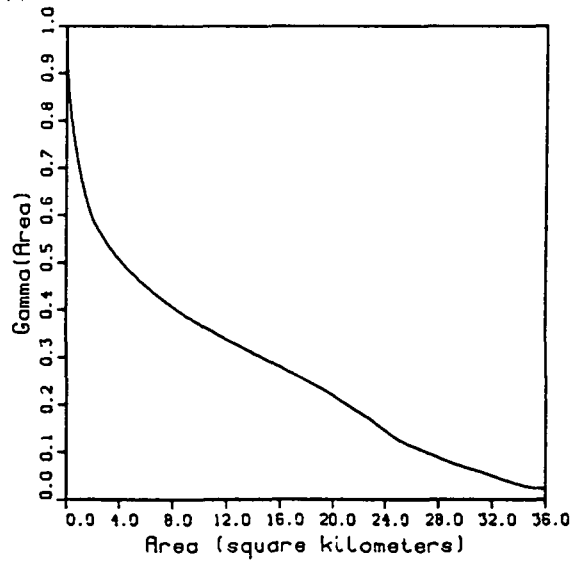
Storm Day
July 20, 1976



Spatial Correlation



Variance Function



Storm Day July 20 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.033$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.967$

Expected Value of Point Depth (mm.): $E(Y) = 5.340$

Variance of Point Depth (mm. sq.): $Var(Y) = 29.719$

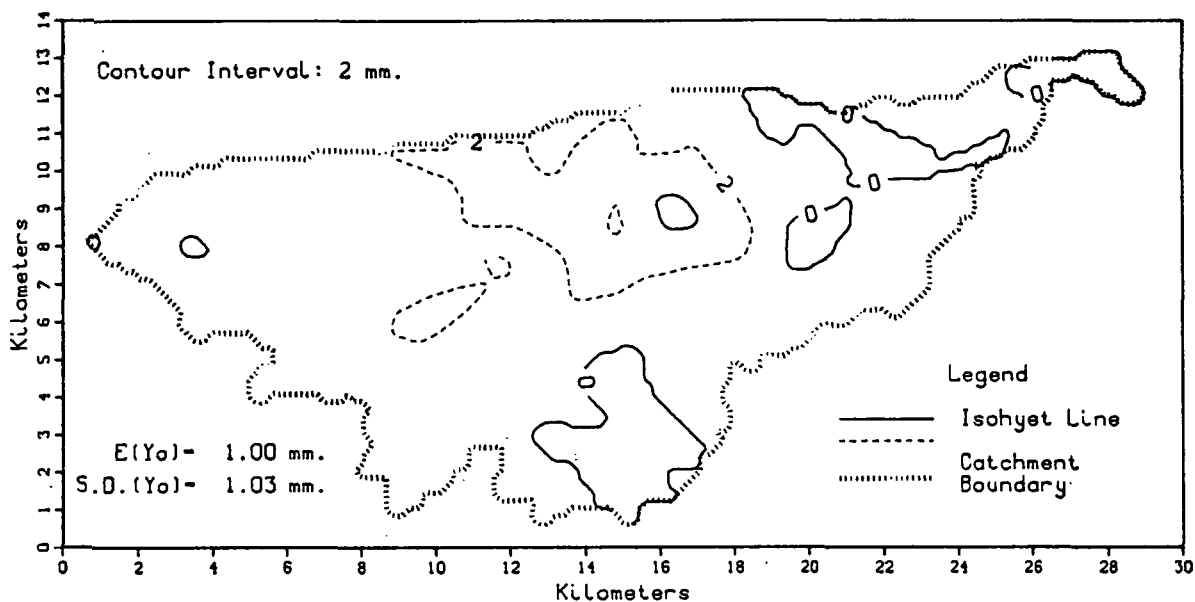
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.887$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.681	0.0	1.000	0.00	1.000
2	0.554	0.2	0.996	0.04	0.936
3	0.480	0.4	0.983	0.16	0.873
4	0.436	0.6	0.964	0.36	0.813
5	0.393	0.8	0.938	0.64	0.754
6	0.350	1.0	0.907	1.00	0.697
7	0.322	1.2	0.872	1.44	0.641
8	0.295	1.4	0.835	1.96	0.594
9	0.263	1.6	0.796	2.56	0.560
10	0.230	1.8	0.757	3.24	0.531
11	0.189	2.0	0.719	4.00	0.504
12	0.156	2.2	0.682	4.84	0.478
13	0.120	2.4	0.647	5.76	0.454
14	0.092	2.6	0.614	6.76	0.429
15	0.063	2.8	0.584	7.84	0.406
16	0.045	3.0	0.556	9.00	0.384
17	0.029	3.2	0.529	10.24	0.363
18	0.011	3.4	0.504	11.56	0.342
19	0.005	3.6	0.481	12.96	0.321
20	0.003	3.8	0.459	14.44	0.299
21	0.001	4.0	0.436	16.00	0.277
22	0.000	4.2	0.412	17.64	0.253
23	0.000	4.4	0.387	19.36	0.227
		4.6	0.359	21.16	0.197
		4.8	0.327	23.04	0.163
		5.0	0.292	25.00	0.123
		5.2	0.254	27.04	0.098
		5.4	0.212	29.16	0.073
		5.6	0.167	31.36	0.055
		5.8	0.123	33.64	0.033
		6.0	0.074	36.00	0.022

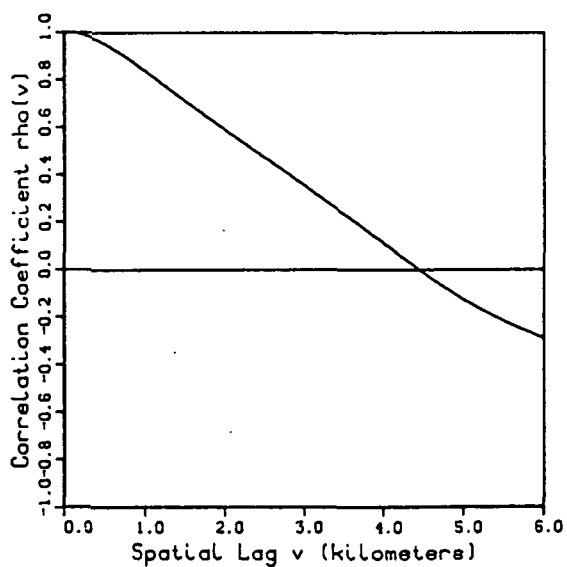
Walnut Gulch, Arizona

$A_c=154.21$ sq.km.

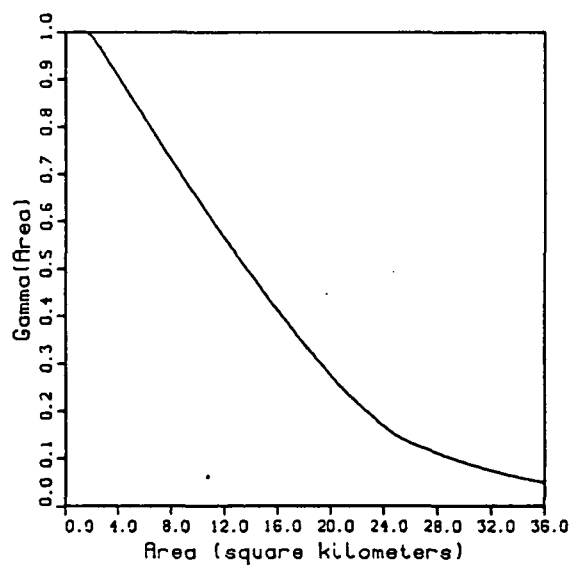
Storm Day
July 21, 1976



Spatial Correlation



Variance Function



Storm Day July 21 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.104$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.896$

Expected Value of Point Depth (mm.): $E(Y)=0.963$

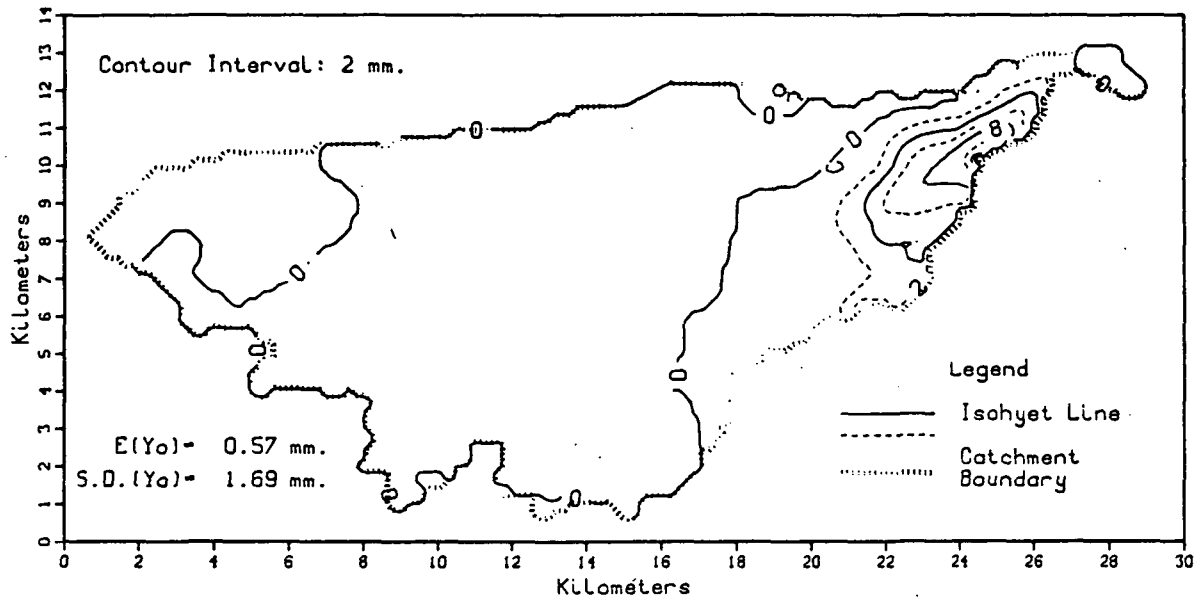
Variance of Point Depth (mm. sq.): $Var(Y)=0.889$

Coef. of Skewness of Point Depth: $S.C.(Y)=1.093$

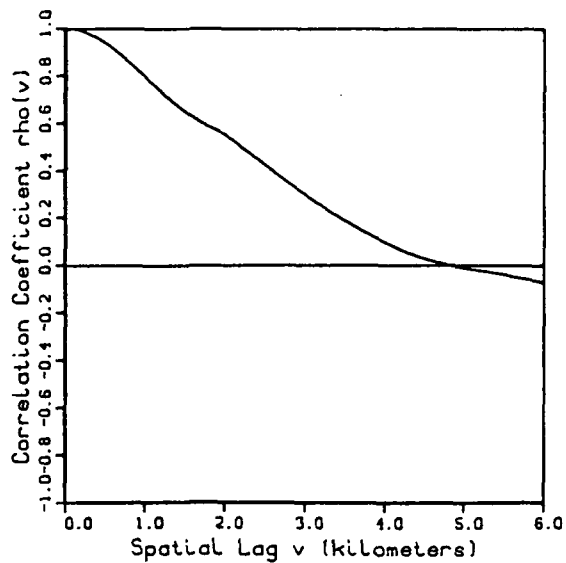
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.367	0.0	1.000	0.00	1.000
2	0.161	0.2	0.990	0.04	1.016
3	0.043	0.4	0.964	0.16	1.027
4	0.005	0.6	0.926	0.36	1.031
5	0.000	0.8	0.881	0.64	1.029
		1.0	0.832	1.00	1.022
		1.2	0.782	1.44	1.008
		1.4	0.731	1.96	0.990
		1.6	0.681	2.56	0.966
		1.8	0.632	3.24	0.936
		2.0	0.584	4.00	0.903
		2.2	0.538	4.84	0.865
		2.4	0.491	5.76	0.825
		2.6	0.445	6.76	0.780
		2.8	0.397	7.84	0.733
		3.0	0.349	9.00	0.684
		3.2	0.301	10.24	0.633
		3.4	0.252	11.56	0.579
		3.6	0.204	12.96	0.524
		3.8	0.156	14.44	0.468
		4.0	0.106	16.00	0.410
		4.2	0.056	17.64	0.350
		4.4	0.006	19.36	0.292
		4.6	-.042	21.16	0.238
		4.8	-.088	23.04	0.188
		5.0	-.131	25.00	0.145
		5.2	-.170	27.04	0.120
		5.4	-.206	29.16	0.097
		5.6	-.238	31.36	0.078
		5.8	-.268	33.64	0.061
		6.0	-.295	36.00	0.048

Walnut Gulch, Arizona
Ac=154.21 sq.km.

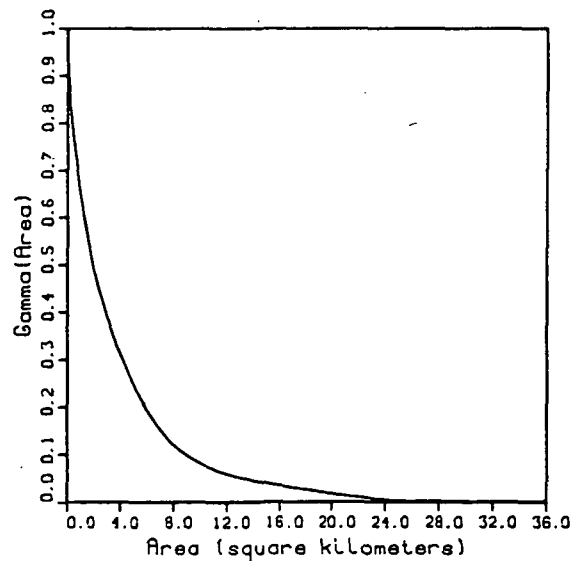
Storm Day
July 22, 1976



Spatial Correlation



Variance Function



Storm Day July 22 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.655$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.345$

Expected Value of Point Depth (mm.): $E(Y) = 0.574$

Variance of Point Depth (mm. sq.): $Var(Y) = 2.497$

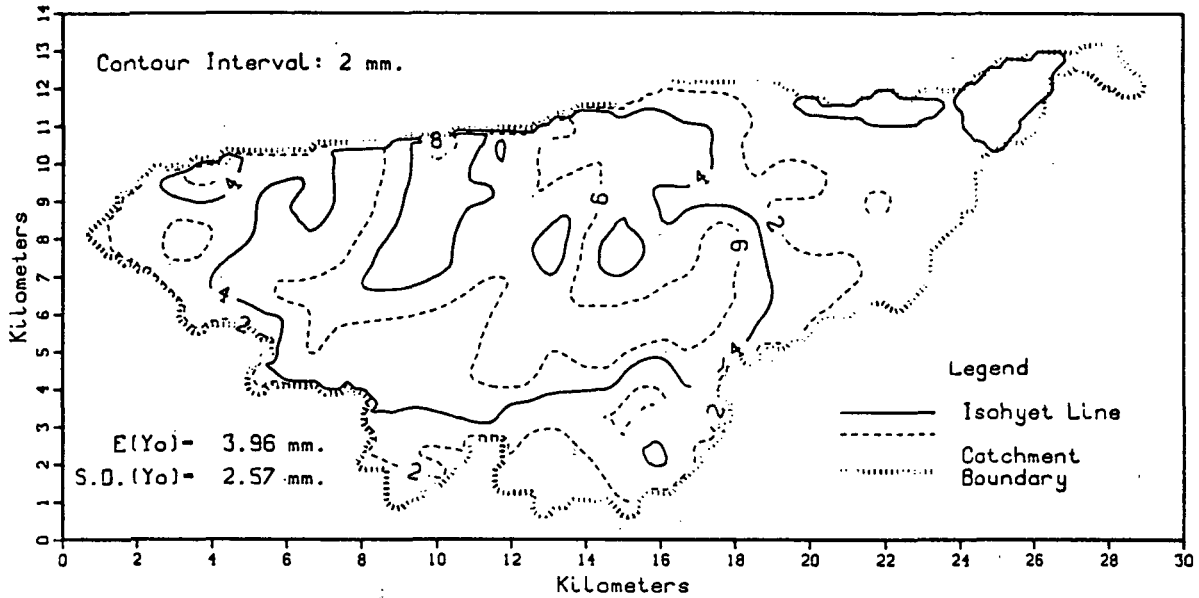
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.622$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.132	0.0	1.000	0.00	1.000
2	0.086	0.2	0.990	0.04	0.940
3	0.069	0.4	0.960	0.16	0.877
4	0.053	0.6	0.914	0.36	0.806
5	0.041	0.8	0.857	0.64	0.731
6	0.029	1.0	0.794	1.00	0.655
7	0.018	1.2	0.730	1.44	0.574
8	0.010	1.4	0.673	1.96	0.495
9	0.005	1.6	0.623	2.56	0.429
10	0.002	1.8	0.582	3.24	0.368
11	0.000	2.0	0.548	4.00	0.309
		2.2	0.496	4.84	0.255
		2.4	0.446	5.76	0.206
		2.6	0.393	6.76	0.161
		2.8	0.343	7.84	0.123
		3.0	0.294	9.00	0.097
		3.2	0.248	10.24	0.077
		3.4	0.204	11.56	0.062
		3.6	0.164	12.96	0.051
		3.8	0.127	14.44	0.042
		4.0	0.092	16.00	0.034
		4.2	0.061	17.64	0.026
		4.4	0.035	19.36	0.019
		4.6	0.014	21.16	0.012
		4.8	-.002	23.04	0.006
		5.0	-.015	25.00	0.001
		5.2	-.026	27.04	0.001
		5.4	-.037	29.16	0.000
		5.6	-.050	31.36	0.000
		5.8	-.062	33.64	0.000
		6.0	-.076	36.00	0.000

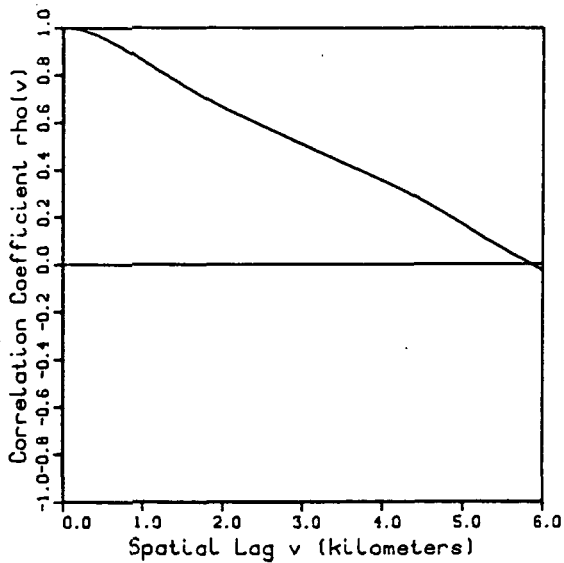
Walnut Gulch, Arizona

Ac=154.21 sq.km.

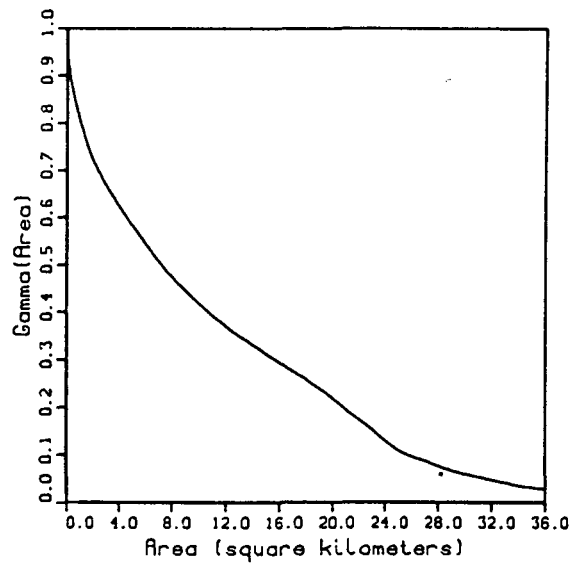
Storm Day
July 23, 1976



Spatial Correlation



Variance Function



Storm Day July 23 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.026$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.974$

Expected Value of Point Depth (mm.): $E(Y) = 4.129$

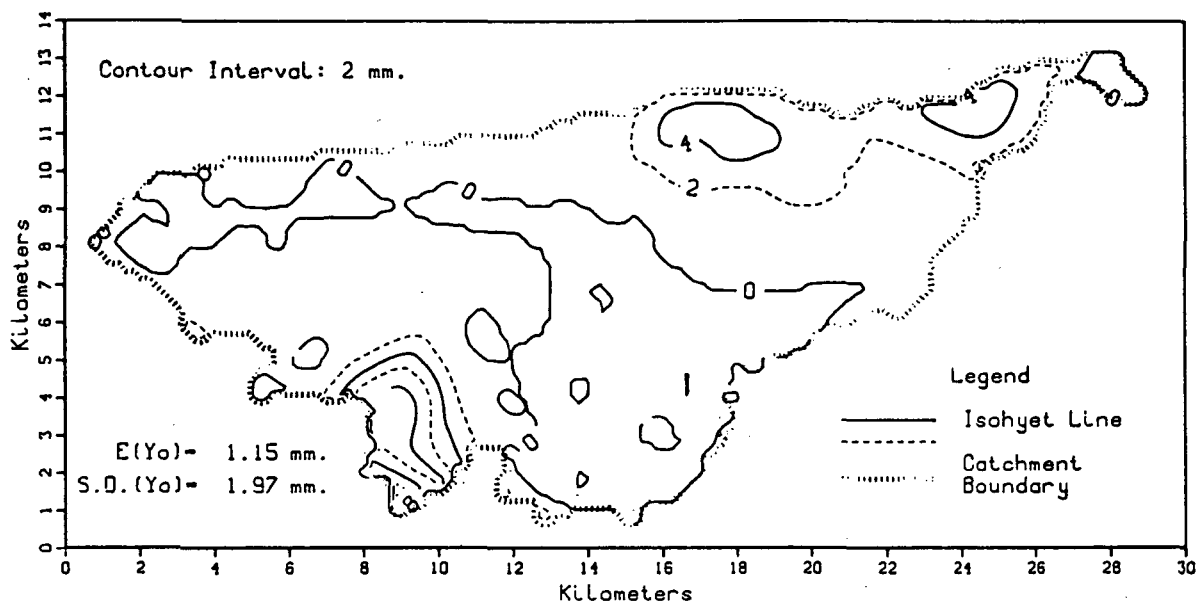
Variance of Point Depth (mm. sq.): $Var(Y) = 5.717$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.041$

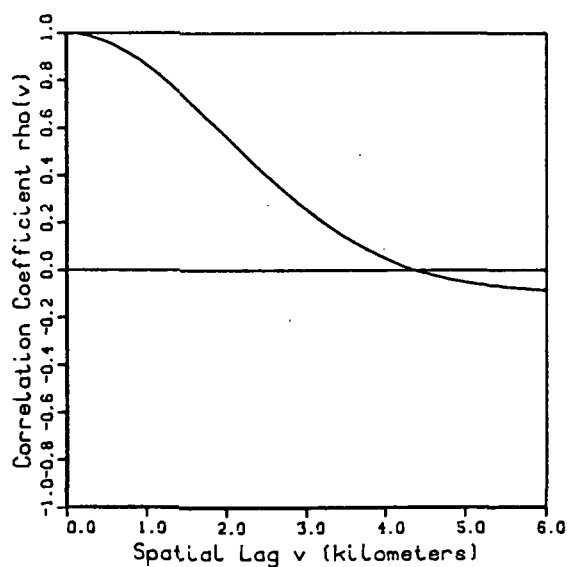
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.895	0.0	1.000	0.00	1.000
2	0.786	0.2	0.992	0.04	0.965
3	0.663	0.4	0.970	0.16	0.925
4	0.537	0.6	0.938	0.36	0.887
5	0.407	0.8	0.899	0.64	0.849
6	0.256	1.0	0.857	1.00	0.809
7	0.121	1.2	0.815	1.44	0.766
8	0.054	1.4	0.773	1.96	0.724
9	0.011	1.6	0.732	2.56	0.689
10	0.002	1.8	0.694	3.24	0.656
11	0.000	2.0	0.659	4.00	0.622
		2.2	0.626	4.84	0.587
		2.4	0.595	5.76	0.551
		2.6	0.564	6.76	0.514
		2.8	0.534	7.84	0.476
		3.0	0.503	9.00	0.443
		3.2	0.471	10.24	0.410
		3.4	0.440	11.56	0.379
		3.6	0.410	12.96	0.349
		3.8	0.381	14.44	0.322
		4.0	0.350	16.00	0.293
		4.2	0.318	17.64	0.263
		4.4	0.283	19.36	0.230
		4.6	0.246	21.16	0.192
		4.8	0.206	23.04	0.152
		5.0	0.166	25.00	0.108
		5.2	0.124	27.04	0.086
		5.4	0.082	29.16	0.064
		5.6	0.044	31.36	0.050
		5.8	0.007	33.64	0.036
		6.0	-0.030	36.00	0.027

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

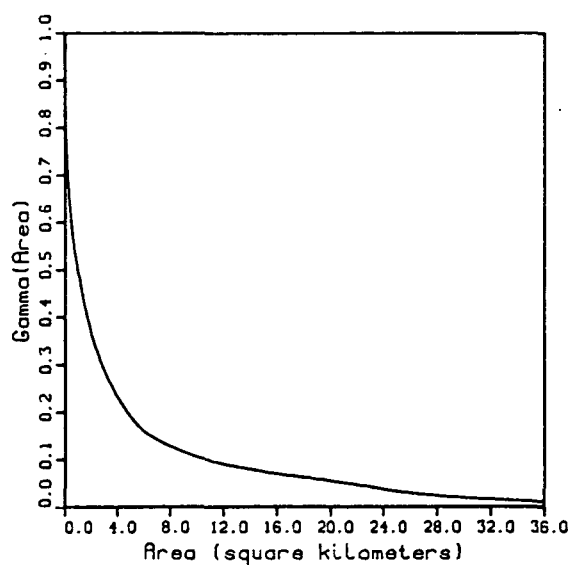
Storm Day
 July 24, 1976



Spatial Correlation



Variance Function



Storm Day July 24 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.280$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.720$

Expected Value of Point Depth (mm.): $E(Y) = 1.172$

Variance of Point Depth (mm. sq.): $Var(Y) = 4.425$

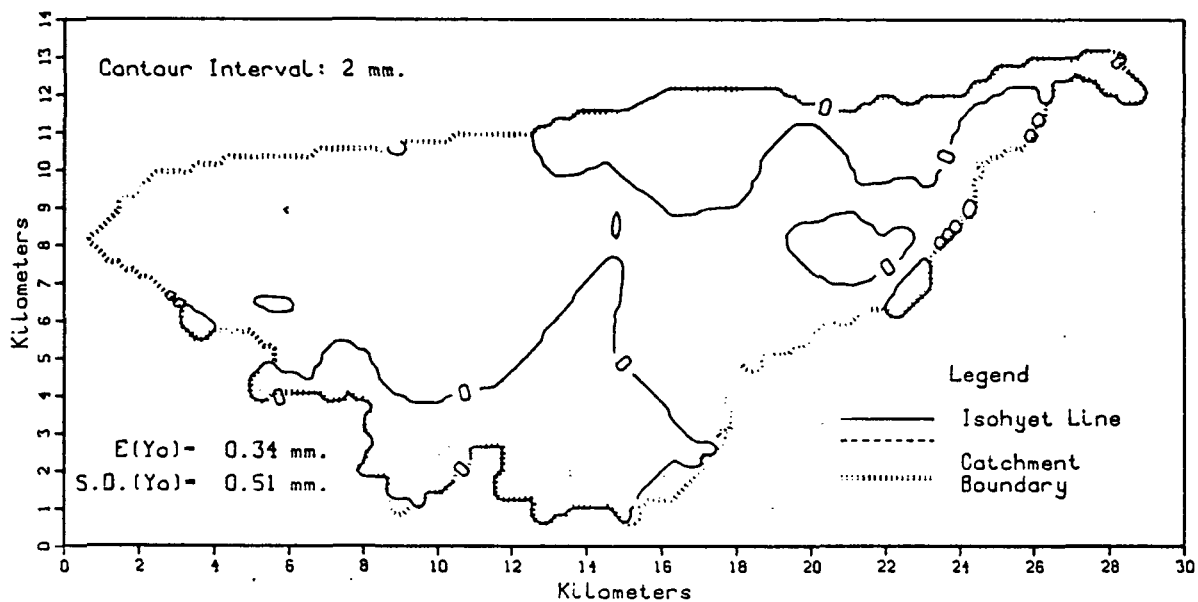
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.145$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.292	0.0	1.000	0.00	1.000
2	0.193	0.2	0.992	0.04	0.868
3	0.132	0.4	0.973	0.16	0.749
4	0.079	0.6	0.945	0.36	0.653
5	0.040	0.8	0.906	0.64	0.568
6	0.032	1.0	0.861	1.00	0.502
7	0.026	1.2	0.807	1.44	0.436
8	0.020	1.4	0.747	1.96	0.371
9	0.014	1.6	0.685	2.56	0.318
10	0.007	1.8	0.623	3.24	0.273
11	0.005	2.0	0.559	4.00	0.230
12	0.003	2.2	0.492	4.84	0.195
13	0.002	2.4	0.427	5.76	0.163
14	0.001	2.6	0.367	6.76	0.144
15	0.001	2.8	0.308	7.84	0.128
16	0.000	3.0	0.253	9.00	0.114
17	0.000	3.2	0.202	10.24	0.102
18	0.000	3.4	0.156	11.56	0.092
19	0.000	3.6	0.115	12.96	0.083
		3.8	0.079	14.44	0.075
		4.0	0.045	16.00	0.068
		4.2	0.016	17.64	0.062
		4.4	-.008	19.36	0.056
		4.6	-.026	21.16	0.048
		4.8	-.043	23.04	0.041
		5.0	-.055	25.00	0.031
		5.2	-.065	27.04	0.025
		5.4	-.072	29.16	0.020
		5.6	-.080	31.36	0.016
		5.8	-.086	33.64	0.013
		6.0	-.089	36.00	0.010

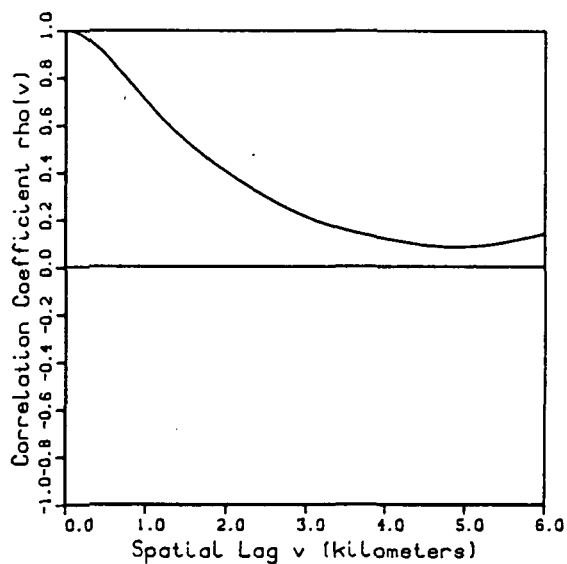
Walnut Gulch, Arizona

Ac=154.21 sq.km.

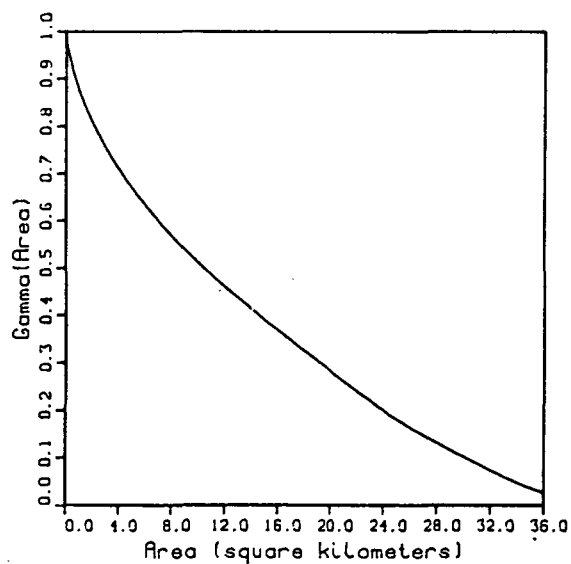
Storm Day
July 25, 1976



Spatial Correlation



Variance Function



Storm Day July 25 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.320$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.680$

Expected Value of Point Depth (mm.): $E(Y) = 0.386$

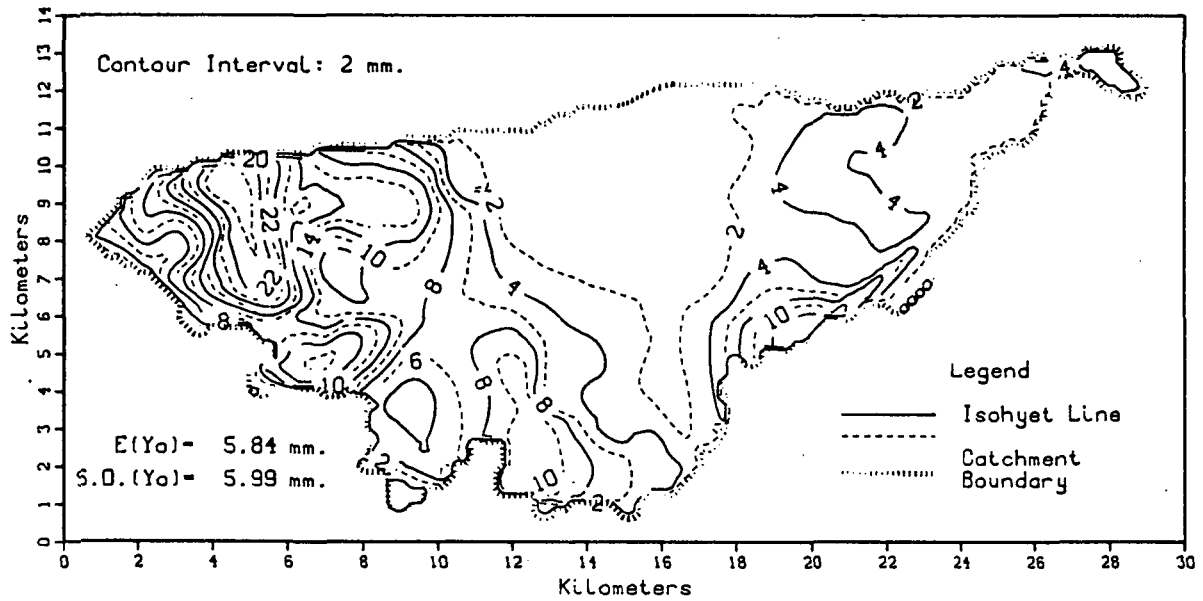
Variance of Point Depth (mm. sq.): $Var(Y) = 0.216$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.099$

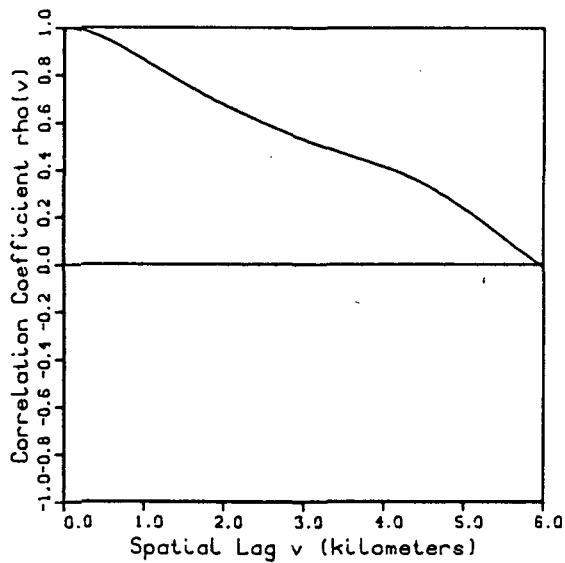
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.145	0.0	1.000	0.00	1.000
2	0.000	0.2	0.979	0.04	0.985
3	0.000	0.4	0.927	0.16	0.965
		0.6	0.856	0.36	0.939
		0.8	0.778	0.64	0.909
		1.0	0.699	1.00	0.877
		1.2	0.625	1.44	0.844
		1.4	0.558	1.96	0.810
		1.6	0.499	2.56	0.776
		1.8	0.448	3.24	0.741
		2.0	0.400	4.00	0.707
		2.2	0.355	4.84	0.672
		2.4	0.313	5.76	0.639
		2.6	0.274	6.76	0.605
		2.8	0.239	7.84	0.571
		3.0	0.209	9.00	0.537
		3.2	0.184	10.24	0.503
		3.4	0.163	11.56	0.469
		3.6	0.145	12.96	0.435
		3.8	0.130	14.44	0.402
		4.0	0.117	16.00	0.367
		4.2	0.105	17.64	0.332
		4.4	0.094	19.36	0.295
		4.6	0.086	21.16	0.257
		4.8	0.083	23.04	0.218
		5.0	0.085	25.00	0.179
		5.2	0.091	27.04	0.146
		5.4	0.100	29.16	0.113
		5.6	0.113	31.36	0.082
		5.8	0.128	33.64	0.051
		6.0	0.146	36.00	0.026

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

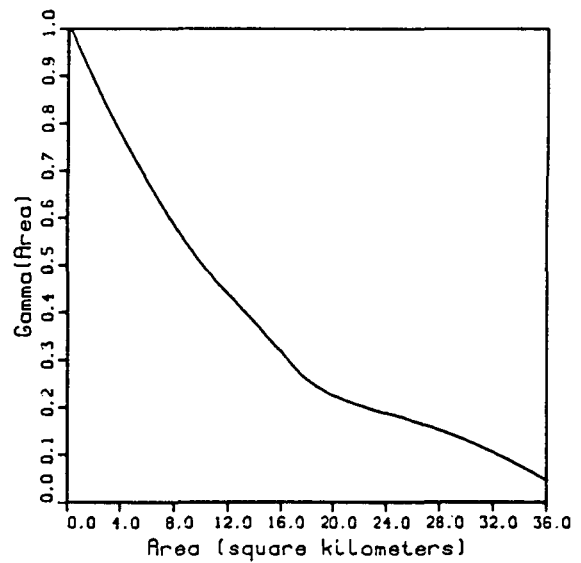
Storm Day
 July 26, 1976



Spatial Correlation



Variance Function



Storm Day July 26 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.002$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.998$

Expected Value of Point Depth (mm.): $E(Y) = 6.422$

Variance of Point Depth (mm. sq.): $Var(Y) = 34.026$

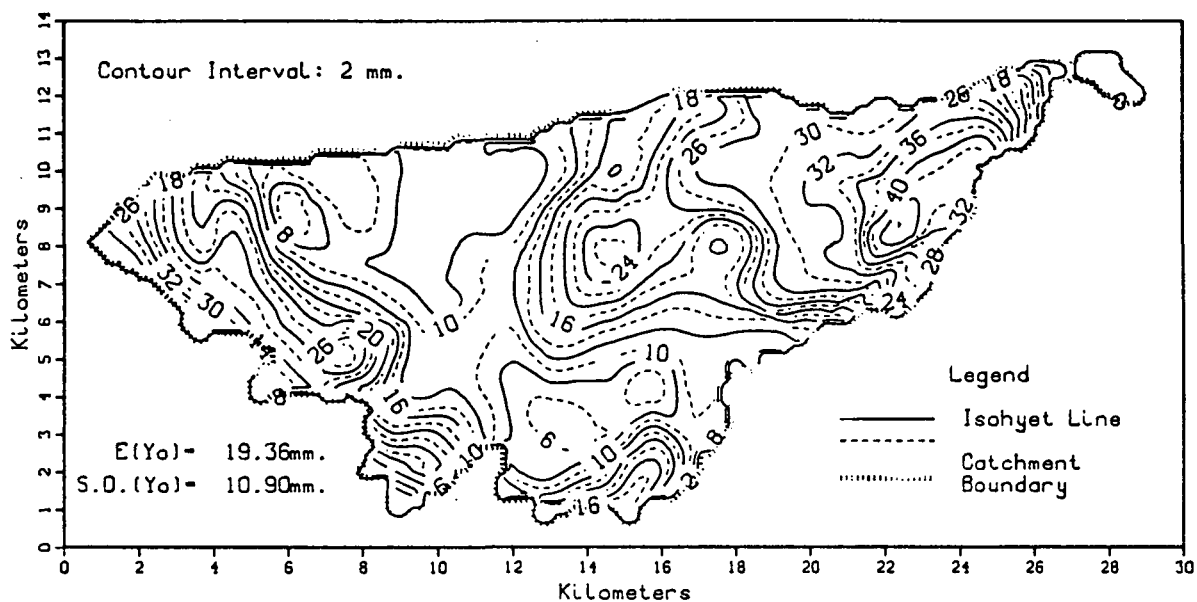
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.496$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.895	0.0	1.000	0.00	1.000
2	0.784	0.2	0.990	0.04	1.005
3	0.665	0.4	0.967	0.16	1.003
4	0.543	0.6	0.936	0.36	0.992
5	0.430	0.8	0.899	0.64	0.974
6	0.379	1.0	0.859	1.00	0.950
7	0.339	1.2	0.819	1.44	0.922
8	0.293	1.4	0.779	1.96	0.891
9	0.252	1.6	0.741	2.56	0.855
10	0.215	1.8	0.705	3.24	0.817
11	0.180	2.0	0.670	4.00	0.776
12	0.156	2.2	0.638	4.84	0.732
13	0.135	2.4	0.607	5.76	0.687
14	0.117	2.6	0.577	6.76	0.639
15	0.100	2.8	0.549	7.84	0.590
16	0.082	3.0	0.523	9.00	0.541
17	0.070	3.2	0.498	10.24	0.494
18	0.057	3.4	0.475	11.56	0.450
19	0.050	3.6	0.452	12.96	0.408
20	0.045	3.8	0.430	14.44	0.363
21	0.040	4.0	0.408	16.00	0.315
22	0.035	4.2	0.383	17.64	0.265
23	0.030	4.4	0.354	19.36	0.231
24	0.023	4.6	0.318	21.16	0.211
25	0.017	4.8	0.277	23.04	0.192
26	0.009	5.0	0.234	25.00	0.178
27	0.002	5.2	0.186	27.04	0.160
28	0.000	5.4	0.137	29.16	0.138
		5.6	0.084	31.36	0.113
		5.8	0.035	33.64	0.081
		6.0	-0.012	36.00	0.045

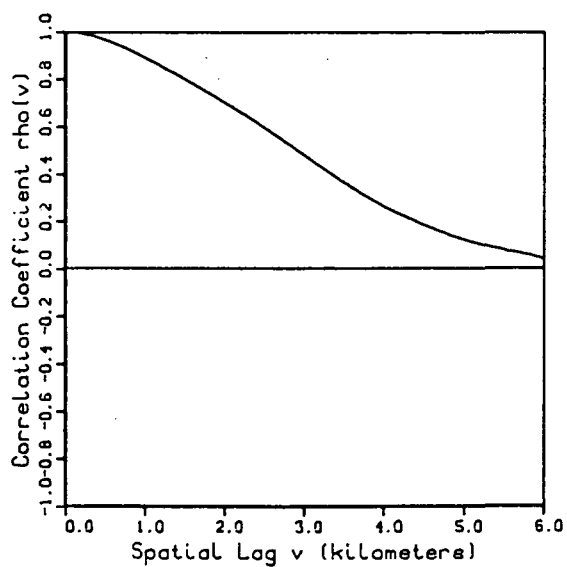
Walnut Gulch, Arizona

Ac=154.21 sq.km.

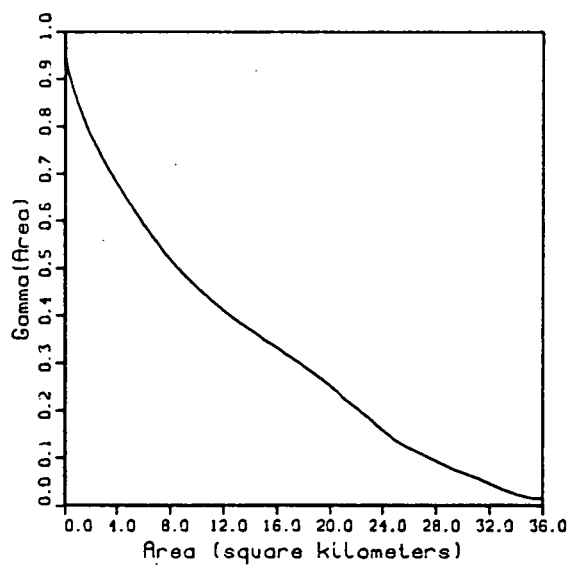
Storm Day
July 27, 1976



Spatial Correlation



Variance Function



Storm Day July 27 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.006$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.994$

Expected Value of Point Depth (mm.): $E(Y) = 19.132$

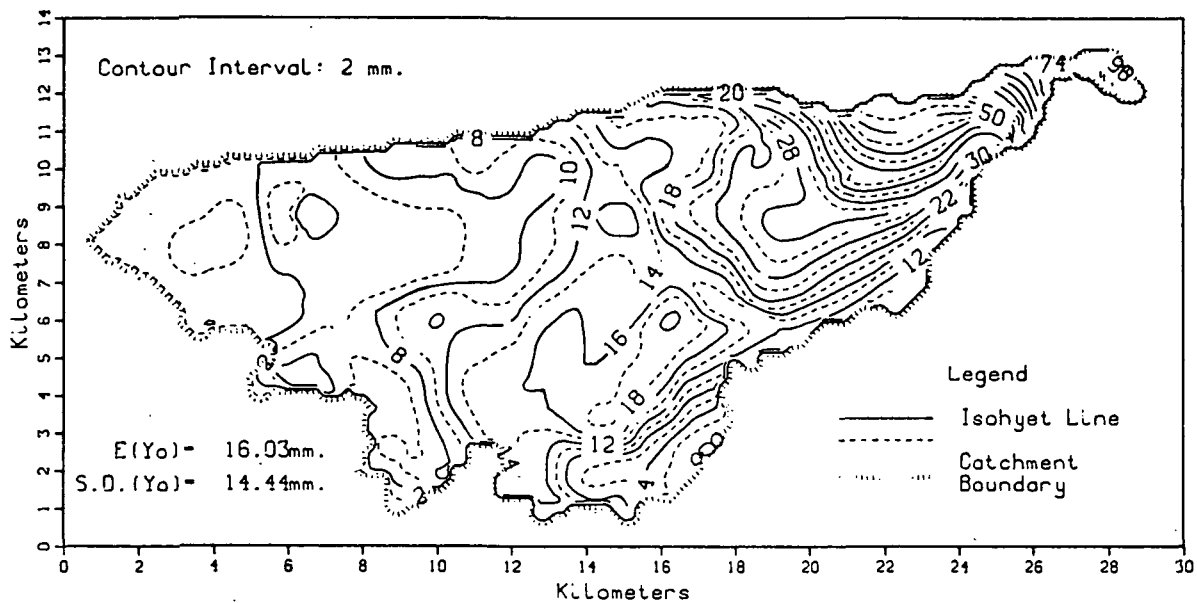
Variance of Point Depth (mm. sq.): $Var(Y)=105.256$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.485$

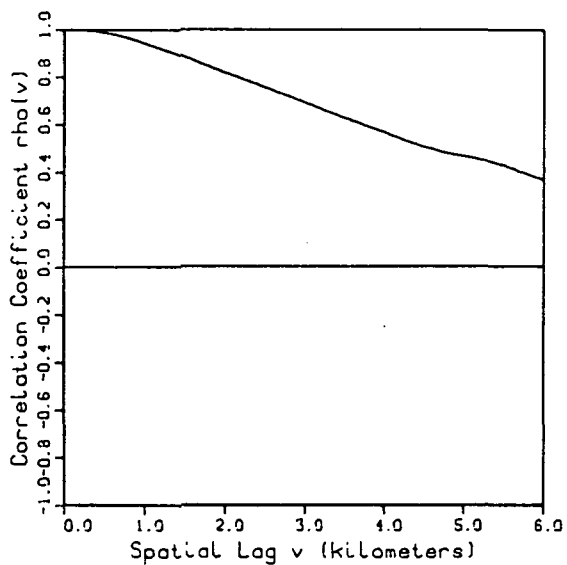
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.994	0.0	1.000	0.00	1.000
3	0.994	0.2	0.994	0.04	0.964
5	0.990	0.4	0.976	0.16	0.933
7	0.919	0.6	0.952	0.36	0.907
9	0.801	0.8	0.922	0.64	0.881
11	0.694	1.0	0.888	1.00	0.852
13	0.615	1.2	0.852	1.44	0.818
15	0.570	1.4	0.815	1.96	0.782
17	0.519	1.6	0.777	2.56	0.747
19	0.459	1.8	0.738	3.24	0.713
21	0.407	2.0	0.698	4.00	0.677
23	0.352	2.2	0.657	4.84	0.639
25	0.297	2.4	0.614	5.76	0.601
27	0.248	2.6	0.570	6.76	0.561
29	0.194	2.8	0.524	7.84	0.521
31	0.141	3.0	0.477	9.00	0.486
33	0.094	3.2	0.431	10.24	0.452
35	0.071	3.4	0.384	11.56	0.419
37	0.053	3.6	0.340	12.96	0.389
39	0.039	3.8	0.299	14.44	0.360
41	0.027	4.0	0.261	16.00	0.331
43	0.012	4.2	0.227	17.64	0.299
45	0.003	4.4	0.197	19.36	0.264
47	0.000	4.6	0.169	21.16	0.223
49	0.000	4.8	0.143	23.04	0.181
		5.0	0.120	25.00	0.134
		5.2	0.102	27.04	0.105
		5.4	0.085	29.16	0.076
		5.6	0.071	31.36	0.053
		5.8	0.057	33.64	0.026
		6.0	0.040	36.00	0.013

Walnut Gulch, Arizona
Ac=154.21 sq.km.

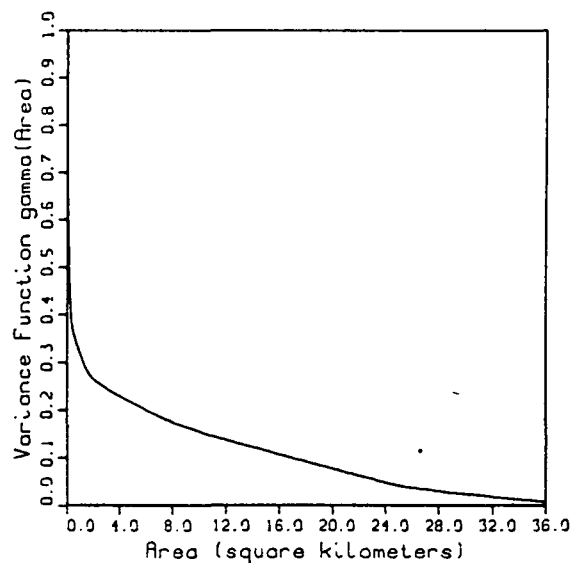
Storm Day
July 28, 1976



Spatial Correlation



Variance Function



Storm Day July 28 1976

Dry Fraction of Total Basin Area: (\bar{A}_{cd}/A_c)=0.000

Wetted Fraction of Total Basin Area: (A_{cw}/A_c)=1.000

Expected Value of Point Depth (mm.): $E(Y) = 15.957$

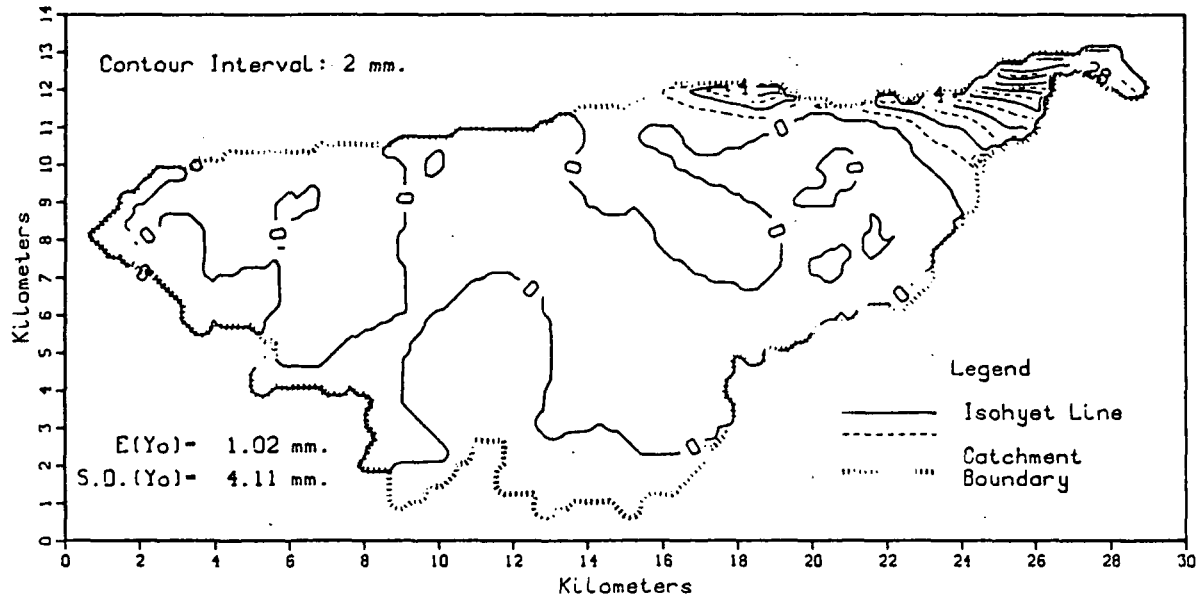
Variance of Point Depth (mm. sq.): $Var(Y) = 293.033$

Coef. of Skewness of Point Depth: $S.C.(Y) = 4.453$

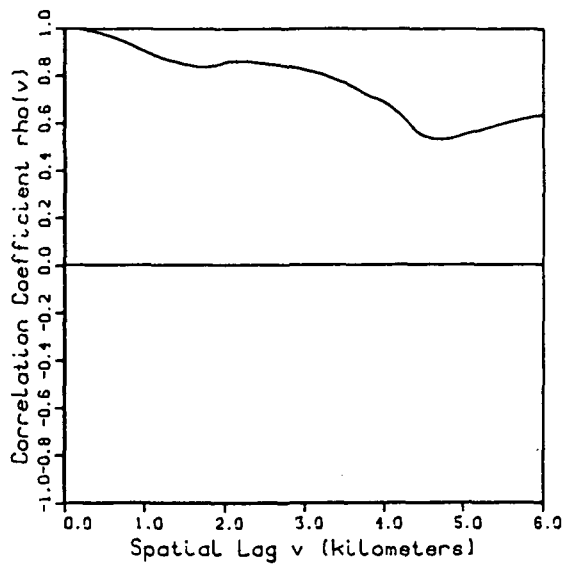
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.997	0.0	1.000	0.00	1.000
6	0.767	0.2	0.998	0.04	0.741
11	0.558	0.4	0.991	0.16	0.503
16	0.340	0.6	0.979	0.36	0.387
21	0.203	0.8	0.962	0.64	0.352
26	0.143	1.0	0.940	1.00	0.320
31	0.094	1.2	0.917	1.44	0.289
36	0.073	1.4	0.892	1.96	0.267
41	0.054	1.6	0.866	2.56	0.253
46	0.039	1.8	0.840	3.24	0.241
51	0.022	2.0	0.813	4.00	0.229
56	0.019	2.2	0.789	4.84	0.216
61	0.017	2.4	0.764	5.76	0.203
66	0.014	2.6	0.739	6.76	0.189
71	0.012	2.8	0.715	7.84	0.175
76	0.010	3.0	0.689	9.00	0.163
81	0.008	3.2	0.662	10.24	0.151
86	0.007	3.4	0.637	11.56	0.140
91	0.007	3.6	0.613	12.96	0.128
96	0.006	3.8	0.588	14.44	0.117
101	0.006	4.0	0.564	16.00	0.106
106	0.006	4.2	0.538	17.64	0.093
111	0.006	4.4	0.513	19.36	0.081
116	0.005	4.6	0.494	21.16	0.068
121	0.005	4.8	0.476	23.04	0.054
126	0.005	5.0	0.464	25.00	0.040
131	0.005	5.2	0.451	27.04	0.033
136	0.004	5.4	0.434	29.16	0.025
141	0.004	5.6	0.413	31.36	0.019
146	0.003	5.8	0.388	33.64	0.012
151	0.003	6.0	0.365	36.00	0.007
156	0.002				
161	0.002				
166	0.002				
171	0.001				
176	0.001				
181	0.001				
186	0.000				
191	0.000				

Walnut Gulch, Arizona
Ac=154.21 sq.km.

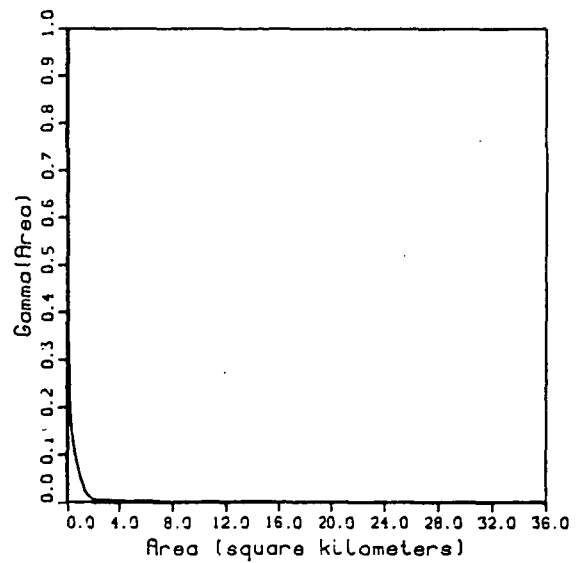
Storm Day
July 29, 1976



Spatial Correlation



Variance Function



Storm Day July 29 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.453$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.547$

Expected Value of Point Depth (mm.): $E(Y) = 0.878$

Variance of Point Depth (mm. sq.): $Var(Y) = 15.051$

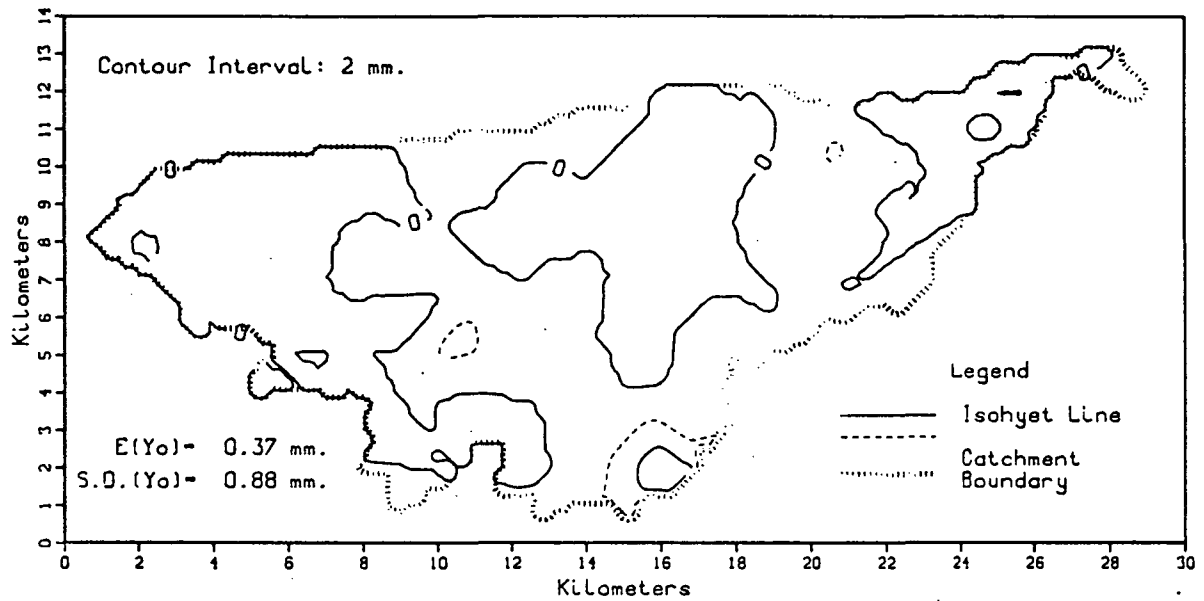
Coef. of Skewness of Point Depth: $S.C.(Y) = 6.385$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.071	0.0	1.000	0.00	1.000
2	0.058	0.2	0.996	0.04	0.653
3	0.049	0.4	0.983	0.16	0.338
4	0.043	0.6	0.961	0.36	0.164
5	0.038	0.8	0.933	0.64	0.104
6	0.034	1.0	0.901	1.00	0.061
7	0.030	1.2	0.874	1.44	0.023
8	0.026	1.4	0.854	1.96	0.007
9	0.023	1.6	0.838	2.56	0.004
10	0.021	1.8	0.836	3.24	0.003
11	0.018	2.0	0.857	4.00	0.003
12	0.017	2.2	0.859	4.84	0.002
13	0.017	2.4	0.853	5.76	0.002
14	0.016	2.6	0.844	6.76	0.001
15	0.015	2.8	0.835	7.84	0.001
16	0.014	3.0	0.822	9.00	0.001
17	0.014	3.2	0.803	10.24	0.001
18	0.013	3.4	0.778	11.56	0.001
19	0.013	3.6	0.750	12.96	0.000
20	0.012	3.8	0.712	14.44	0.000
21	0.012	4.0	0.685	16.00	0.000
22	0.011	4.2	0.633	17.64	0.000
23	0.011	4.4	0.565	19.36	0.000
24	0.011	4.6	0.532	21.16	0.000
25	0.010	4.8	0.533	23.04	0.000
26	0.010	5.0	0.552	25.00	0.000
27	0.009	5.2	0.570	27.04	0.000
28	0.008	5.4	0.591	29.16	0.000
29	0.007	5.6	0.608	31.36	0.000
30	0.006	5.8	0.623	33.64	0.000
31	0.004	6.0	0.639	36.00	0.000
32	0.003				
33	0.001				
34	0.000				
35	0.000				
36	0.000				

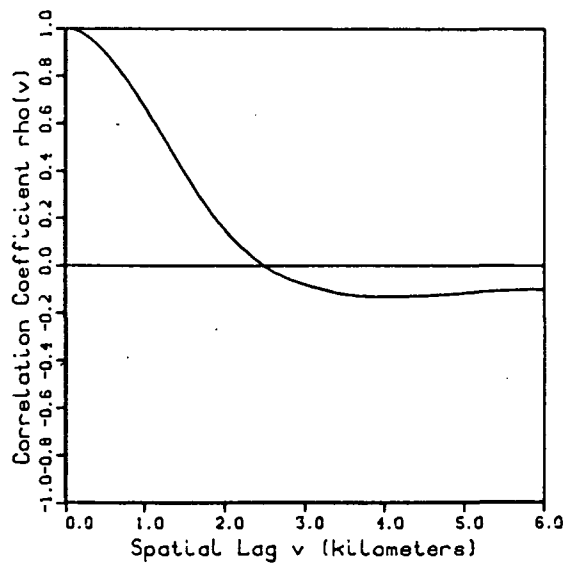
Walnut Gulch, Arizona

Ac=154.21 sq.km.

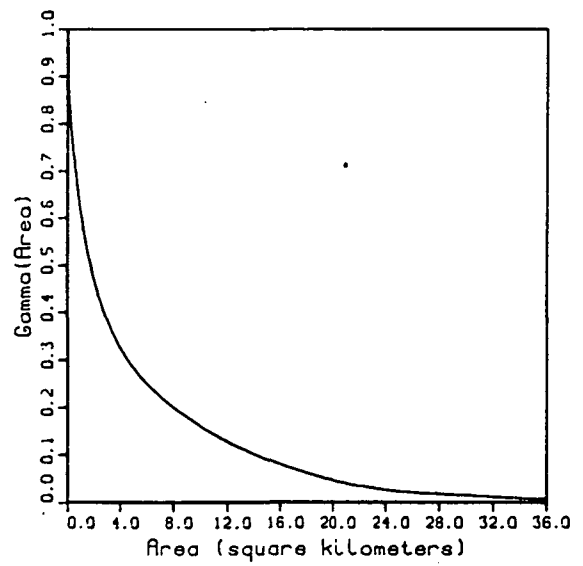
Storm Day
July 30, 1976



Spatial Correlation



Variance Function



Storm Day July 30 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.479$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.521$

Expected Value of Point Depth (mm.): $E(Y) = 0.313$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.454$

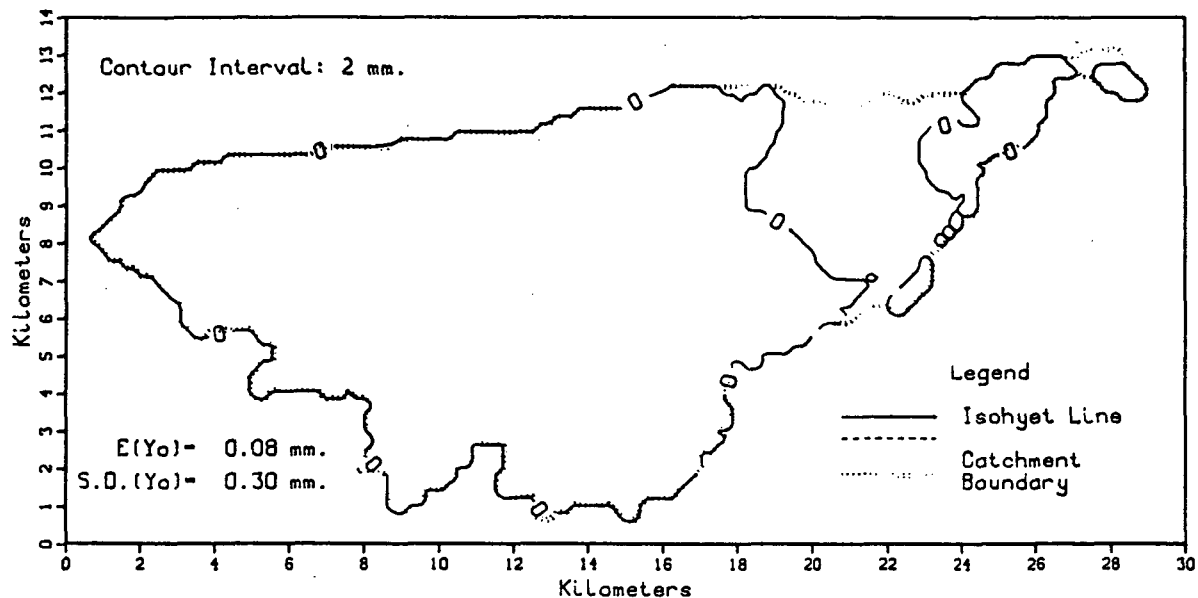
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.466$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho(v)		Variance Function A (km.sq.) Gamma(A)	
1	0.106	0.0	1.000	0.00	1.000
2	0.030	0.2	0.981	0.04	0.931
3	0.015	0.4	0.932	0.16	0.857
4	0.007	0.6	0.859	0.36	0.779
5	0.000	0.8	0.769	0.64	0.702
		1.0	0.667	1.00	0.623
		1.2	0.557	1.44	0.548
		1.4	0.444	1.96	0.479
		1.6	0.334	2.56	0.418
		1.8	0.234	3.24	0.366
		2.0	0.150	4.00	0.323
		2.2	0.080	4.84	0.286
		2.4	0.021	5.76	0.255
		2.6	-.025	6.76	0.227
		2.8	-.058	7.84	0.201
		3.0	-.083	9.00	0.177
		3.2	-.103	10.24	0.155
		3.4	-.120	11.56	0.133
		3.6	-.131	12.96	0.113
		3.8	-.136	14.44	0.095
		4.0	-.136	16.00	0.079
		4.2	-.134	17.64	0.063
		4.4	-.131	19.36	0.050
		4.6	-.128	21.16	0.038
		4.8	-.124	23.04	0.029
		5.0	-.118	25.00	0.022
		5.2	-.113	27.04	0.018
		5.4	-.109	29.16	0.015
		5.6	-.106	31.36	0.011
		5.8	-.104	33.64	0.008
		6.0	-.105	36.00	0.005

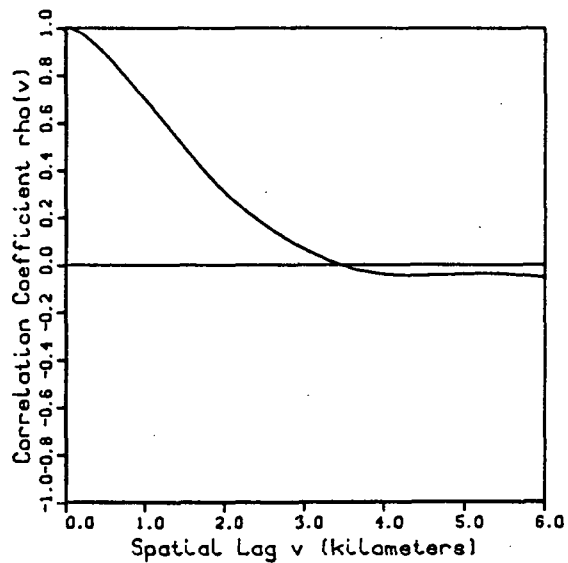
Walnut Gulch, Arizona

$A_c = 154.21$ sq.km.

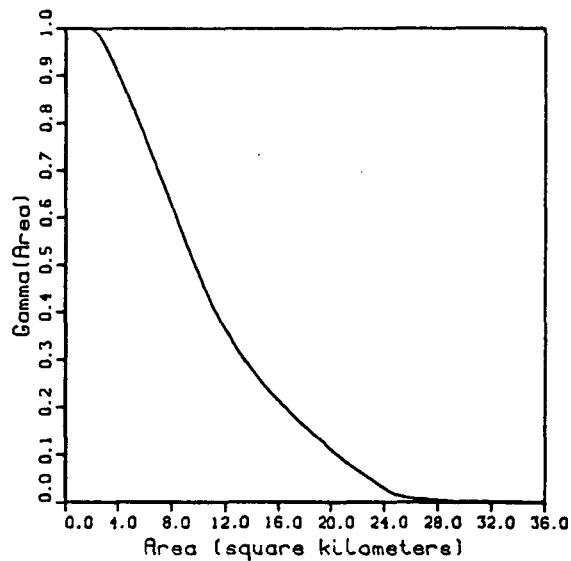
Storm Day
Aug 7, 1976



Spatial Correlation



Variance Function



Storm Day Aug 7 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.857$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.143$

Expected Value of Point Depth (mm.): $E(Y) = 0.060$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.051$

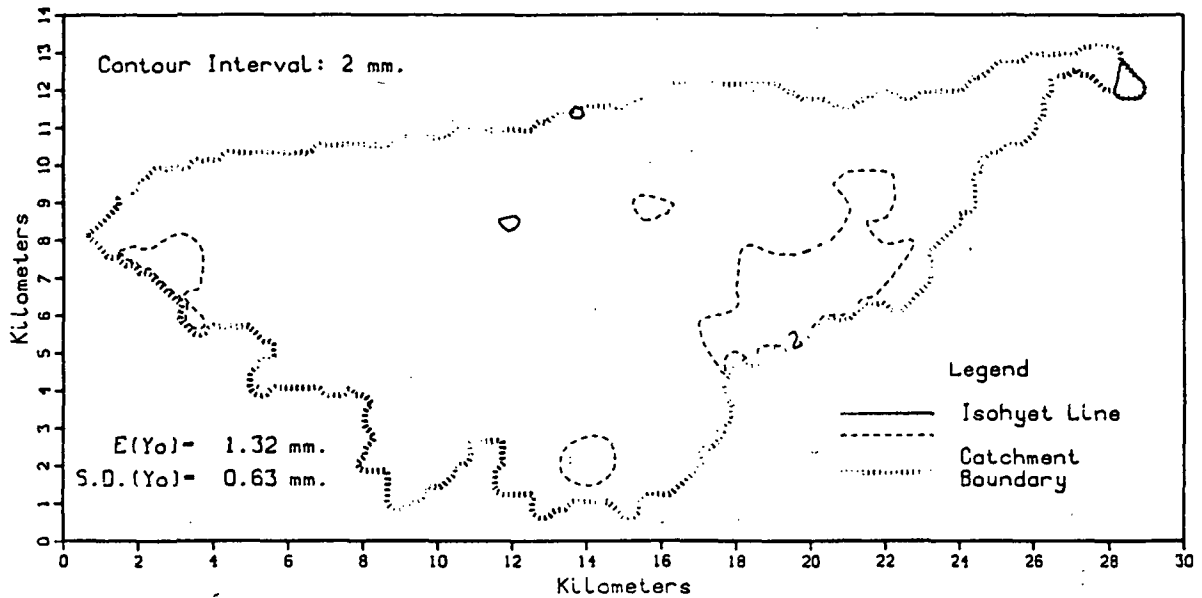
Coef. of Skewness of Point Depth: $S.C.(Y) = 4.478$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.022	0.0	1.000	0.00	1.000
2	0.000	0.2	0.974	0.04	1.028
		0.4	0.918	0.16	1.049
		0.6	0.848	0.36	1.058
		0.8	0.772	0.64	1.055
		1.0	0.694	1.00	1.045
		1.2	0.614	1.44	1.029
		1.4	0.531	1.96	1.009
		1.6	0.449	2.56	0.982
		1.8	0.373	3.24	0.947
		2.0	0.303	4.00	0.901
		2.2	0.243	4.84	0.847
		2.4	0.189	5.76	0.784
		2.6	0.142	6.76	0.712
		2.8	0.100	7.84	0.634
		3.0	0.063	9.00	0.549
		3.2	0.030	10.24	0.464
		3.4	0.002	11.56	0.385
		3.6	-0.019	12.96	0.317
		3.8	-0.034	14.44	0.262
		4.0	-0.043	16.00	0.212
		4.2	-0.047	17.64	0.167
		4.4	-0.048	19.36	0.124
		4.6	-0.046	21.16	0.083
		4.8	-0.043	23.04	0.046
		5.0	-0.041	25.00	0.013
		5.2	-0.040	27.04	0.006
		5.4	-0.041	29.16	0.001
		5.6	-0.045	31.36	0.000
		5.8	-0.050	33.64	0.000
		6.0	-0.057	36.00	0.000

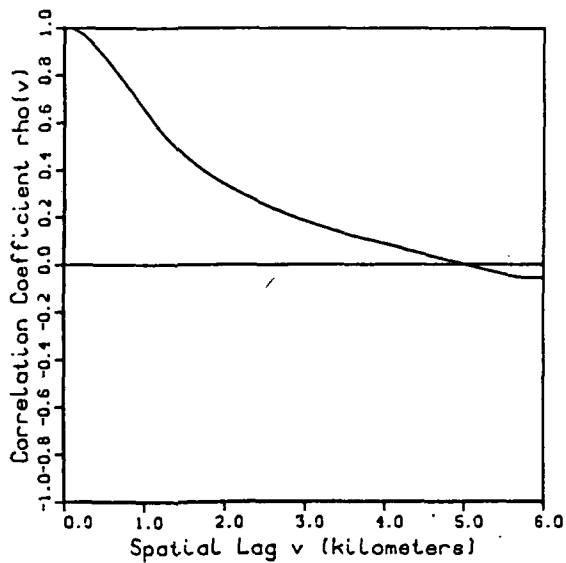
Walnut Gulch, Arizona

Ac=154.21 sq.km.

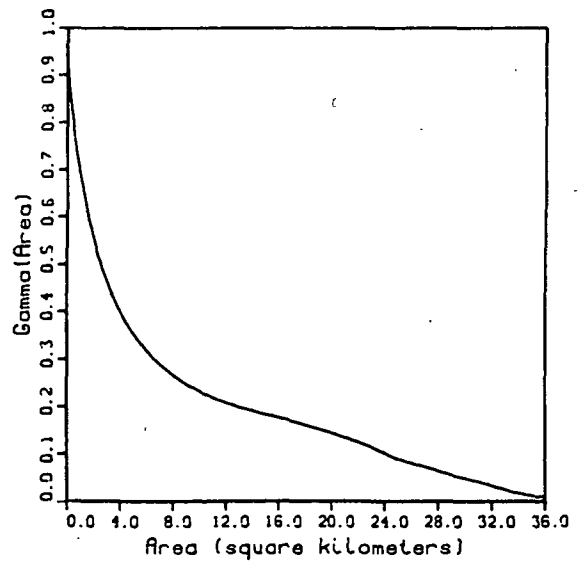
Storm Day
Aug 8, 1976



Spatial Correlation



Variance Function



C-4

Storm Day Aug 8 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.002$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.998$

Expected Value of Point Depth (mm.): $E(Y) = 1.353$

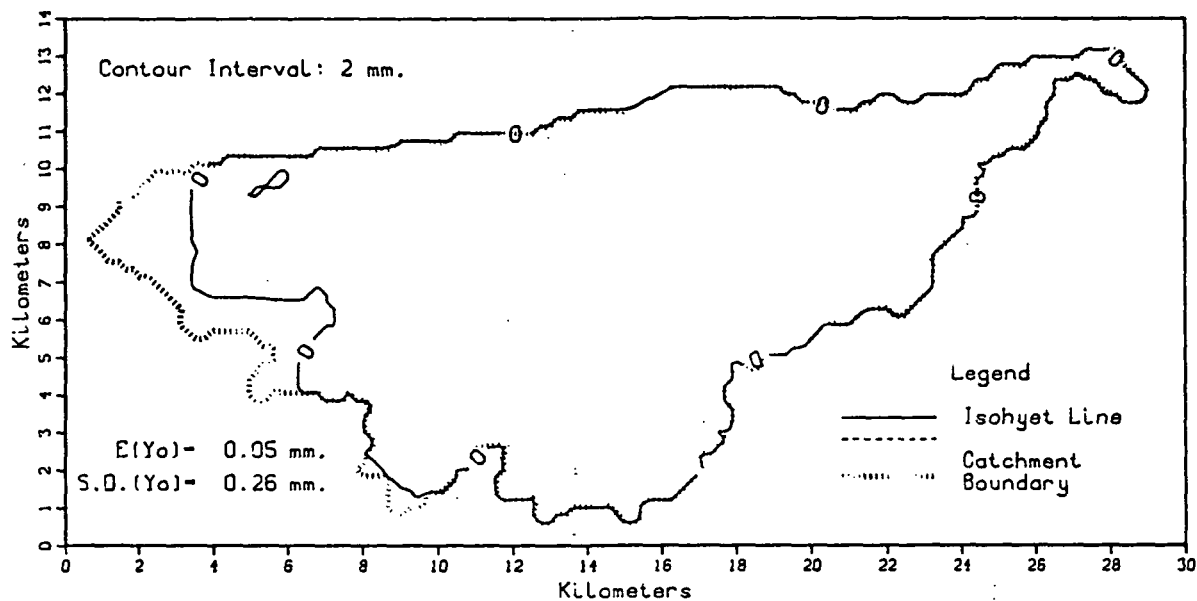
Variance of Point Depth (mm. sq.): $Var(Y) = 0.313$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.841$

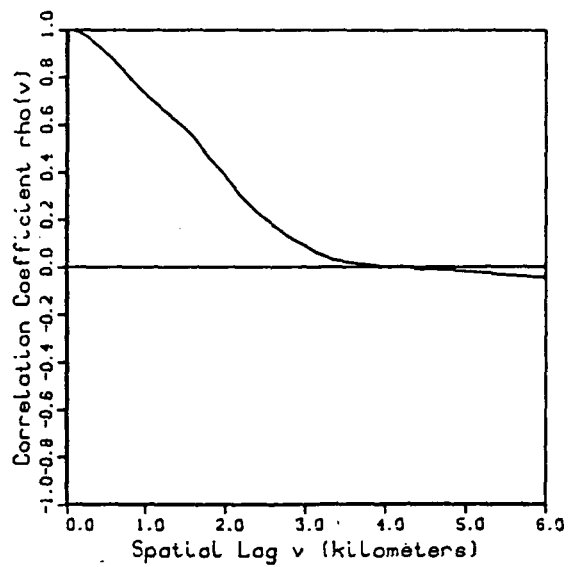
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.766	0.0	1.000	0.00	1.000
2	0.103	0.2	0.976	0.04	0.951
3	0.019	0.4	0.916	0.16	0.891
4	0.000	0.6	0.836	0.36	0.828
		0.8	0.745	0.64	0.762
		1.0	0.652	1.00	0.694
		1.2	0.566	1.44	0.627
		1.4	0.491	1.96	0.562
		1.6	0.430	2.56	0.502
		1.8	0.379	3.24	0.448
		2.0	0.336	4.00	0.400
		2.2	0.299	4.84	0.359
		2.4	0.265	5.76	0.324
		2.6	0.234	6.76	0.294
		2.8	0.207	7.84	0.268
		3.0	0.181	9.00	0.246
		3.2	0.158	10.24	0.227
		3.4	0.137	11.56	0.211
		3.6	0.117	12.96	0.197
		3.8	0.101	14.44	0.186
		4.0	0.085	16.00	0.174
		4.2	0.067	17.64	0.162
		4.4	0.048	19.36	0.148
		4.6	0.030	21.16	0.132
		4.8	0.014	23.04	0.113
		5.0	-.002	25.00	0.088
		5.2	-.020	27.04	0.071
		5.4	-.038	29.16	0.053
		5.6	-.052	31.36	0.038
		5.8	-.060	33.64	0.019
		6.0	-.060	36.00	0.008

Walnut Gulch, Arizona
Ac=154.21 sq.km.

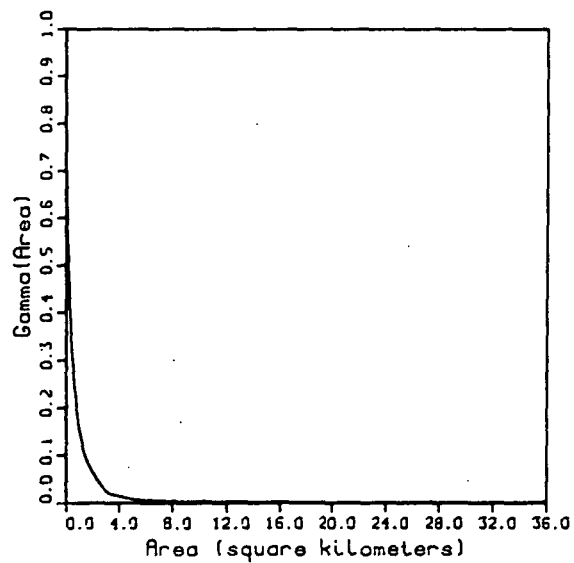
Storm Day
Aug 9, 1976



Spatial Correlation



Variance Function



Storm Day Aug 9 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.926$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.074$

Expected Value of Point Depth (mm.): $E(Y) = 0.043$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.042$

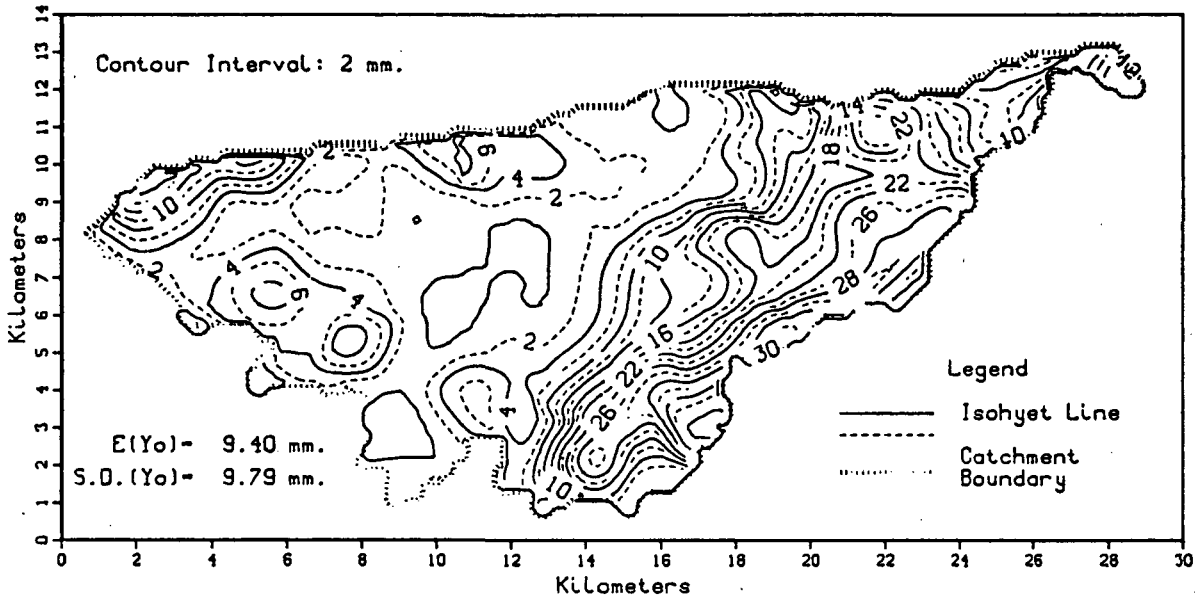
Coef. of Skewness of Point Depth: $S.C.(Y) = 5.479$

Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	0.017	0.0	1.000	0.00	1.000
2	0.000	0.2	0.980	0.04	0.746
		0.4	0.932	0.16	0.534
		0.6	0.868	0.36	0.374
		0.8	0.796	0.64	0.256
		1.0	0.728	1.00	0.164
		1.2	0.665	1.44	0.103
		1.4	0.609	1.96	0.067
		1.6	0.545	2.56	0.041
		1.8	0.459	3.24	0.021
		2.0	0.382	4.00	0.014
		2.2	0.298	4.84	0.008
		2.4	0.228	5.76	0.005
		2.6	0.176	6.76	0.004
		2.8	0.125	7.84	0.003
		3.0	0.086	9.00	0.002
		3.2	0.049	10.24	0.002
		3.4	0.024	11.56	0.001
		3.6	0.014	12.96	0.001
		3.8	0.004	14.44	0.001
		4.0	-.003	16.00	0.001
		4.2	-.001	17.64	0.000
		4.4	-.010	19.36	0.000
		4.6	-.013	21.16	0.000
		4.8	-.016	23.04	0.000
		5.0	-.022	25.00	0.000
		5.2	-.028	27.04	0.000
		5.4	-.034	29.16	0.000
		5.6	-.041	31.36	0.000
		5.8	-.046	33.64	0.000
		6.0	-.049	36.00	0.000

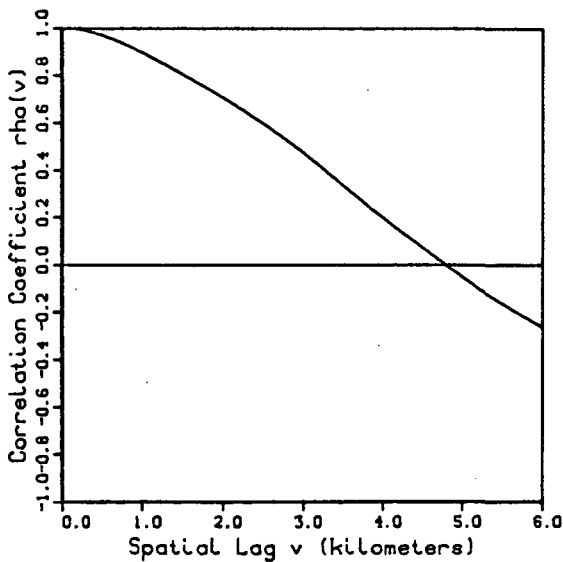
Walnut Gulch, Arizona

Ac=154.21 sq.km.

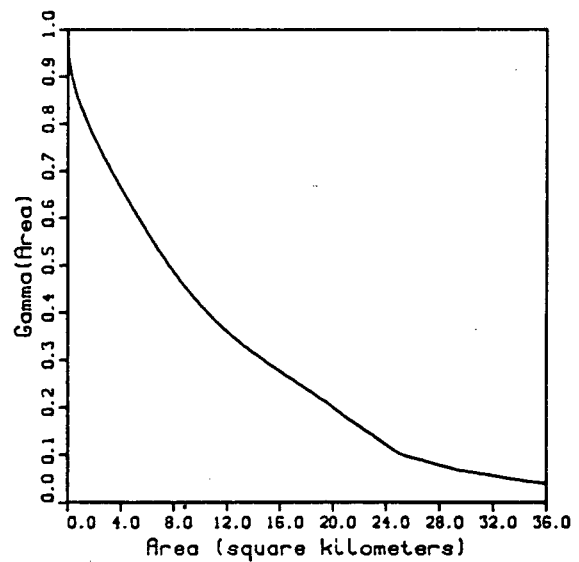
Storm Day
Aug 10, 1976



Spatial Correlation.



Variance Function



Storm Day Aug 10 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.045$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.955$

Expected Value of Point Depth (mm.): $E(Y) = 9.947$

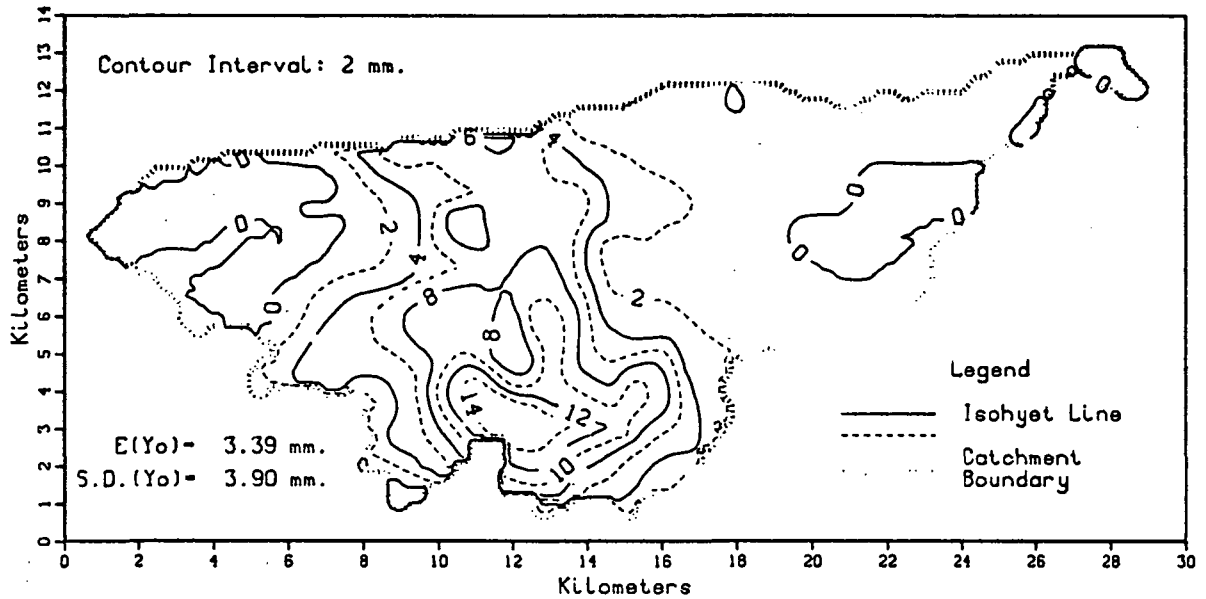
Variance of Point Depth (mm. sq.): $Var(Y)=102.647$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.000$

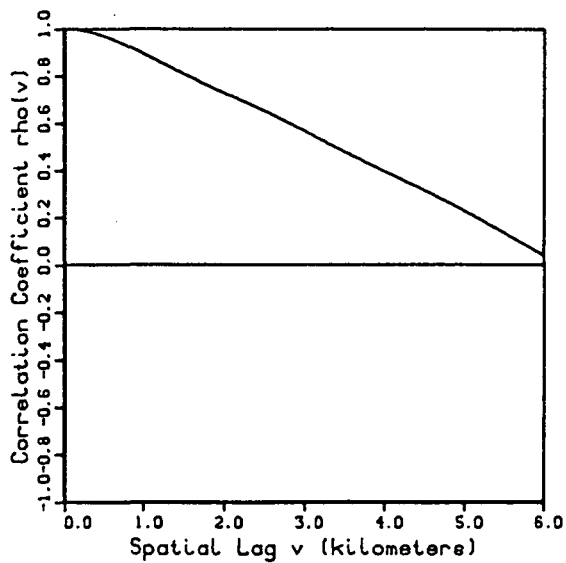
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km. sq.) Gamma (A)	
1	0.849	0.0	1.000	0.00	1.000
3	0.639	0.2	0.994	0.04	0.965
5	0.524	0.4	0.978	0.16	0.927
7	0.443	0.6	0.955	0.36	0.895
9	0.383	0.8	0.926	0.64	0.866
11	0.344	1.0	0.893	1.00	0.835
13	0.310	1.2	0.857	1.44	0.804
15	0.281	1.4	0.819	1.96	0.771
17	0.254	1.6	0.781	2.56	0.736
19	0.222	1.8	0.742	3.24	0.700
21	0.184	2.0	0.702	4.00	0.661
23	0.151	2.2	0.660	4.84	0.621
25	0.121	2.4	0.615	5.76	0.579
27	0.088	2.6	0.569	6.76	0.534
29	0.053	2.8	0.520	7.84	0.489
31	0.032	3.0	0.469	9.00	0.447
33	0.022	3.2	0.415	10.24	0.407
35	0.014	3.4	0.359	11.56	0.370
37	0.011	3.6	0.303	12.96	0.335
39	0.007	3.8	0.248	14.44	0.304
41	0.001	4.0	0.194	16.00	0.274
43	0.001	4.2	0.142	17.64	0.244
45	0.000	4.4	0.092	19.36	0.211
47	0.000	4.6	0.042	21.16	0.175
		4.8	-.007	23.04	0.139
		5.0	-.056	25.00	0.101
		5.2	-.104	27.04	0.084
		5.4	-.150	29.16	0.068
		5.6	-.191	31.36	0.058
		5.8	-.231	33.64	0.047
		6.0	-.268	36.00	0.039

Walnut Gulch, Arizona
Ac=154.21 sq.km.

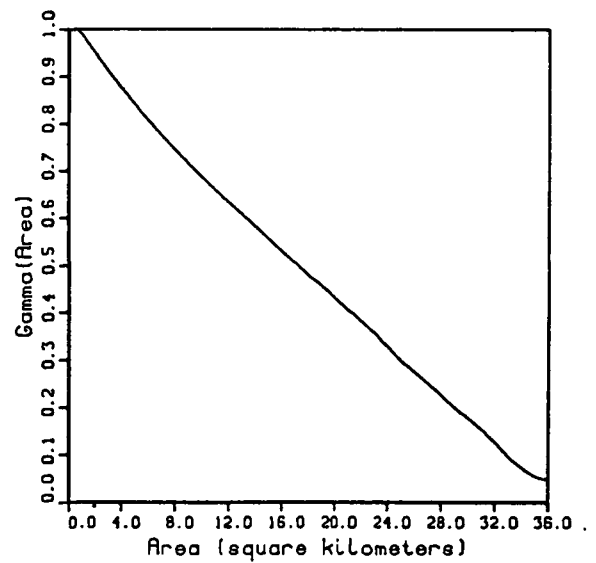
Storm Day
Aug 12, 1976



Spatial Correlation



Variance Function



Storm Day Aug 12 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.143$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.857$

Expected Value of Point Depth (mm.): $E(Y) = 3.552$

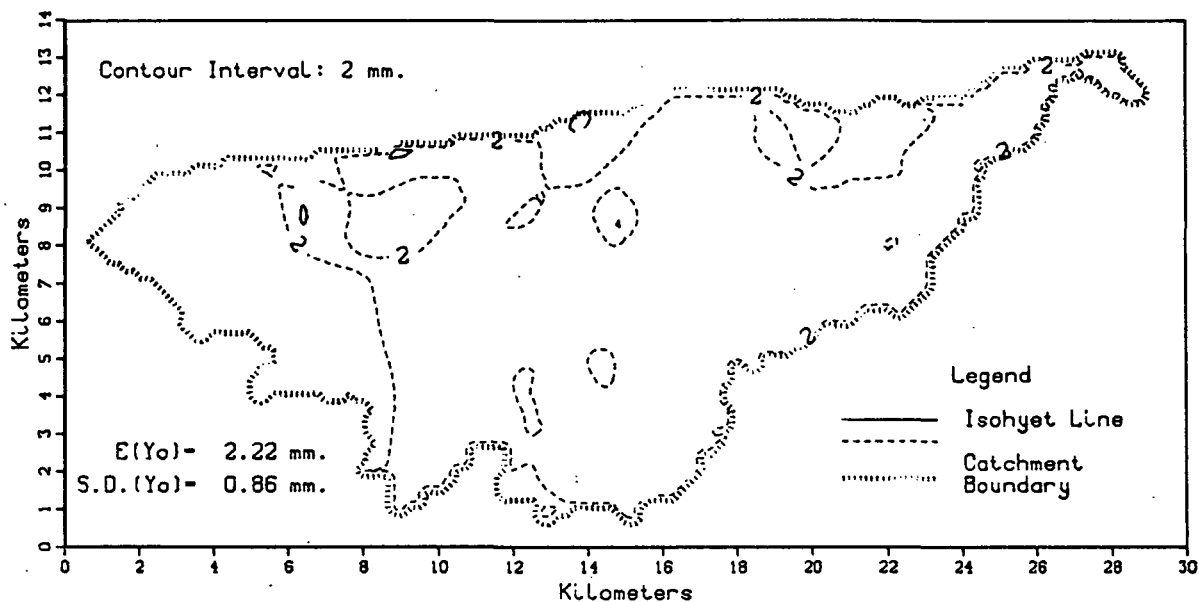
Variance of Point Depth (mm. sq.): $Var(Y) = 14.512$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.008$

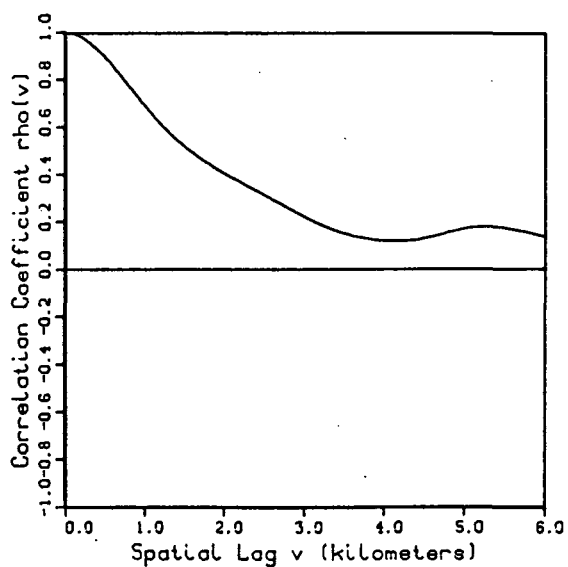
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.608	0.0	1.000	0.00	1.000
2	0.494	0.2	0.994	0.04	1.010
3	0.440	0.4	0.978	0.16	1.015
4	0.381	0.6	0.954	0.36	1.013
5	0.324	0.8	0.925	0.64	1.004
6	0.279	1.0	0.891	1.00	0.990
7	0.219	1.2	0.857	1.44	0.973
8	0.153	1.4	0.822	1.96	0.952
9	0.100	1.6	0.788	2.56	0.928
10	0.070	1.8	0.756	3.24	0.902
11	0.045	2.0	0.725	4.00	0.874
12	0.033	2.2	0.695	4.84	0.844
13	0.025	2.4	0.665	5.76	0.813
14	0.017	2.6	0.634	6.76	0.781
15	0.007	2.8	0.600	7.84	0.748
16	0.000	3.0	0.565	9.00	0.714
		3.2	0.530	10.24	0.679
		3.4	0.495	11.56	0.644
		3.6	0.460	12.96	0.608
		3.8	0.427	14.44	0.570
		4.0	0.395	16.00	0.530
		4.2	0.362	17.64	0.488
		4.4	0.330	19.36	0.446
		4.6	0.297	21.16	0.403
		4.8	0.263	23.04	0.356
		5.0	0.228	25.00	0.298
		5.2	0.191	27.04	0.250
		5.4	0.153	29.16	0.196
		5.6	0.116	31.36	0.146
		5.8	0.078	33.64	0.081
		6.0	0.039	36.00	0.047

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

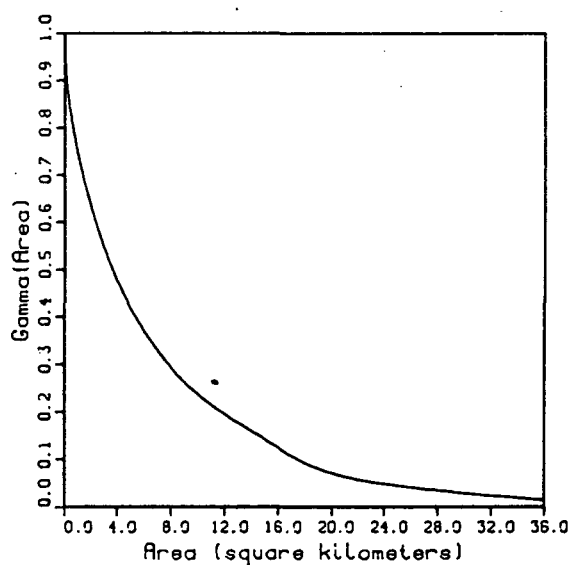
Storm Day
 Aug 16, 1976



Spatial Correlation



Variance Function



Storm Day Aug 16 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 2.304$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.595$

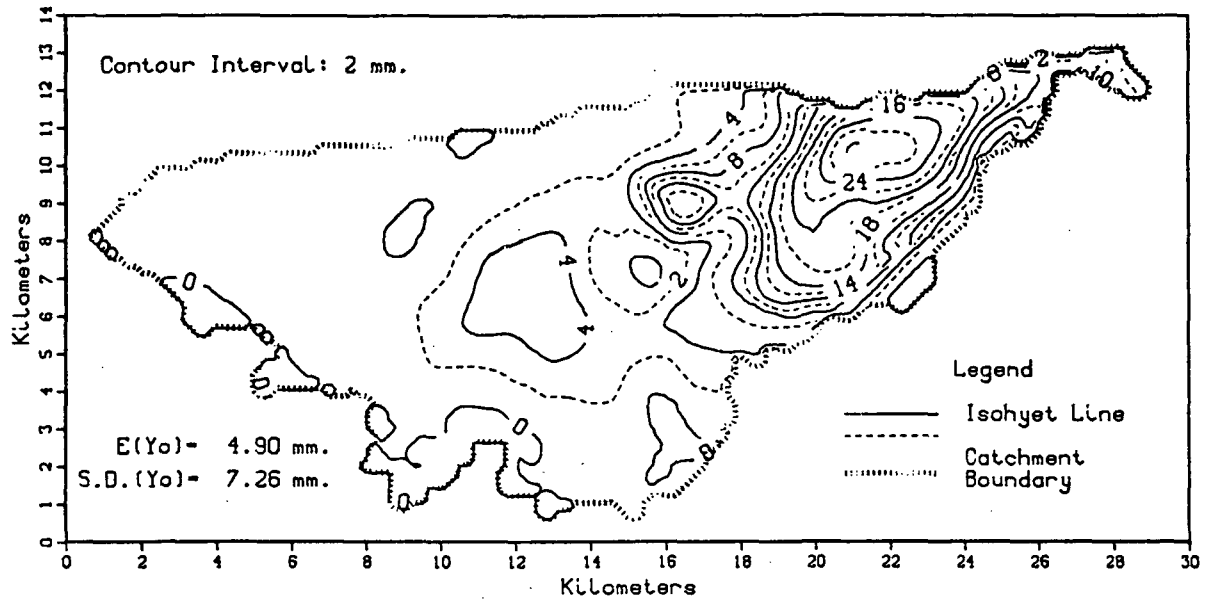
Coef. of Skewness of Point Depth: $S.C.(Y) = -0.424$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.913	0.0	1.000	0.00	1.000
2	0.717	0.2	0.978	0.04	0.959
3	0.200	0.4	0.926	0.16	0.909
4	0.001	0.6	0.853	0.36	0.855
5	0.000	0.8	0.770	0.64	0.801
		1.0	0.686	1.00	0.744
		1.2	0.609	1.44	0.689
		1.4	0.543	1.96	0.634
		1.6	0.488	2.56	0.579
		1.8	0.442	3.24	0.523
		2.0	0.402	4.00	0.473
		2.2	0.365	4.84	0.424
		2.4	0.329	5.76	0.379
		2.6	0.292	6.76	0.337
		2.8	0.255	7.84	0.297
		3.0	0.220	9.00	0.261
		3.2	0.187	10.24	0.229
		3.4	0.160	11.56	0.201
		3.6	0.140	12.96	0.176
		3.8	0.127	14.44	0.150
		4.0	0.119	16.00	0.123
		4.2	0.119	17.64	0.096
		4.4	0.126	19.36	0.076
		4.6	0.141	21.16	0.062
		4.8	0.159	23.04	0.051
		5.0	0.174	25.00	0.044
		5.2	0.181	27.04	0.037
		5.4	0.178	29.16	0.030
		5.6	0.167	31.36	0.024
		5.8	0.152	33.64	0.019
		6.0	0.136	36.00	0.013

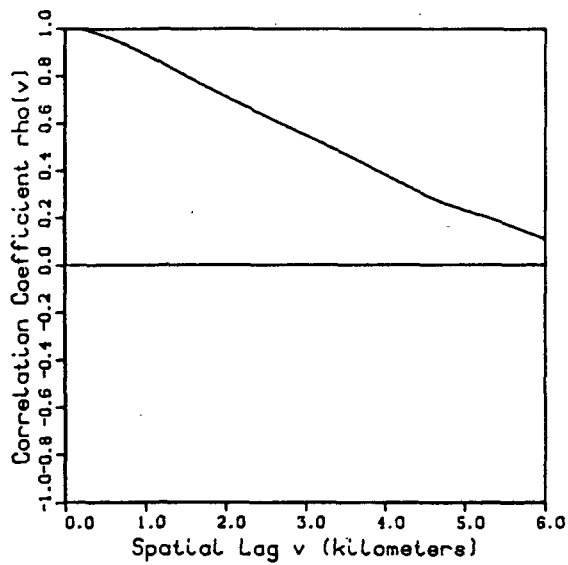
Walnut Gulch, Arizona

Ac=154.21 sq.km.

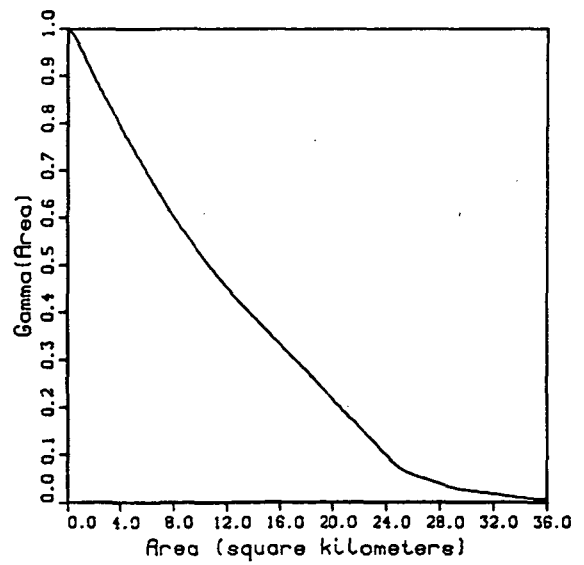
Storm Day
Aug 17, 1976



Spatial Correlation



Variance Function



Storm Day Aug 17 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.055$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.945$

Expected Value of Point Depth (mm.): $E(Y) = 5.007$

Variance of Point Depth (mm. sq.): $Var(Y) = 47.026$

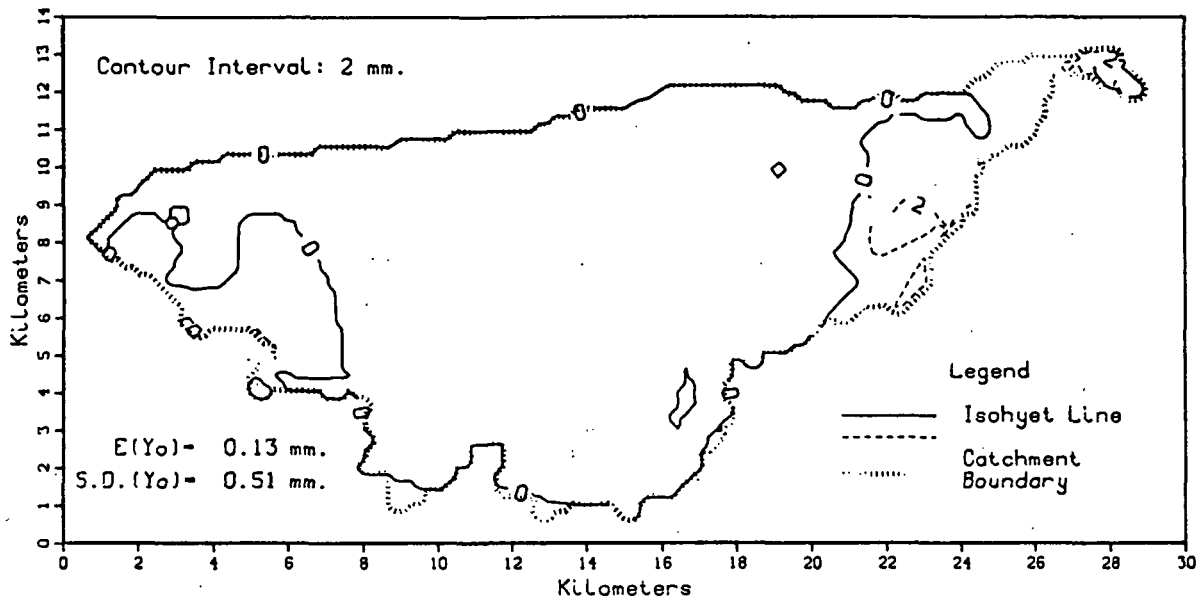
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.659$

Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	0.623	0.0	1.000	0.00	1.000
2	0.487	0.2	0.994	0.04	1.001
3	0.410	0.4	0.977	0.16	0.996
4	0.341	0.6	0.951	0.36	0.988
5	0.285	0.8	0.921	0.64	0.975
6	0.248	1.0	0.886	1.00	0.956
7	0.231	1.2	0.850	1.44	0.930
8	0.216	1.4	0.814	1.96	0.899
9	0.202	1.6	0.777	2.56	0.865
10	0.190	1.8	0.741	3.24	0.830
11	0.176	2.0	0.707	4.00	0.791
12	0.161	2.2	0.673	4.84	0.749
13	0.148	2.4	0.640	5.76	0.704
14	0.137	2.6	0.607	6.76	0.655
15	0.124	2.8	0.576	7.84	0.607
16	0.113	3.0	0.545	9.00	0.560
17	0.103	3.2	0.513	10.24	0.512
18	0.091	3.4	0.481	11.56	0.466
19	0.078	3.6	0.448	12.96	0.420
20	0.064	3.8	0.413	14.44	0.377
21	0.056	4.0	0.378	16.00	0.332
22	0.047	4.2	0.343	17.64	0.284
23	0.037	4.4	0.309	19.36	0.234
24	0.028	4.6	0.277	21.16	0.180
25	0.020	4.8	0.251	23.04	0.126
26	0.013	5.0	0.229	25.00	0.070
27	0.003	5.2	0.208	27.04	0.047
28	0.001	5.4	0.185	29.16	0.028
29	0.000	5.6	0.159	31.36	0.019
		5.8	0.133	33.64	0.010
		6.0	0.106	36.00	0.005

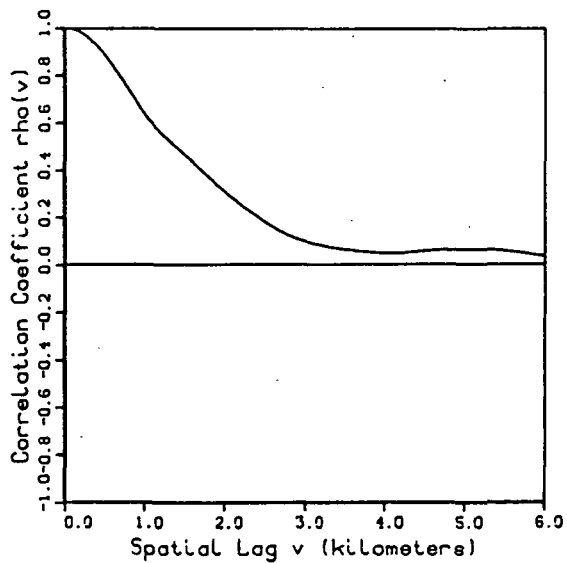
Walnut Gulch, Arizona

Ac=154.21 sq.km.

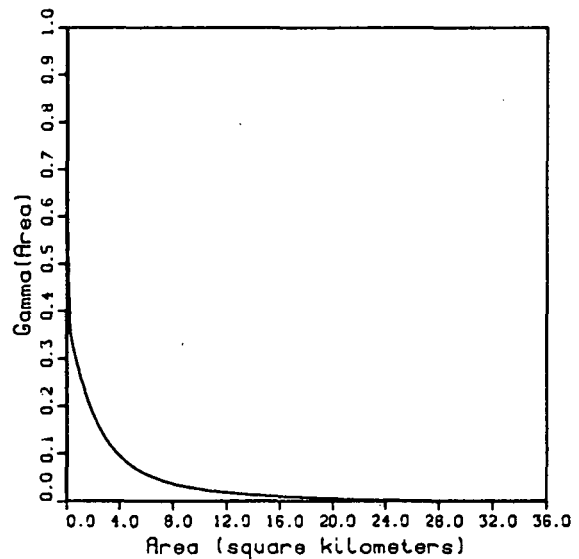
Storm Day
Aug 18, 1976



Spatial Correlation



Variance Function



Storm Day Aug 18 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.780$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.220$

Expected Value of Point Depth (mm.): $E(Y) = 0.179$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.431$

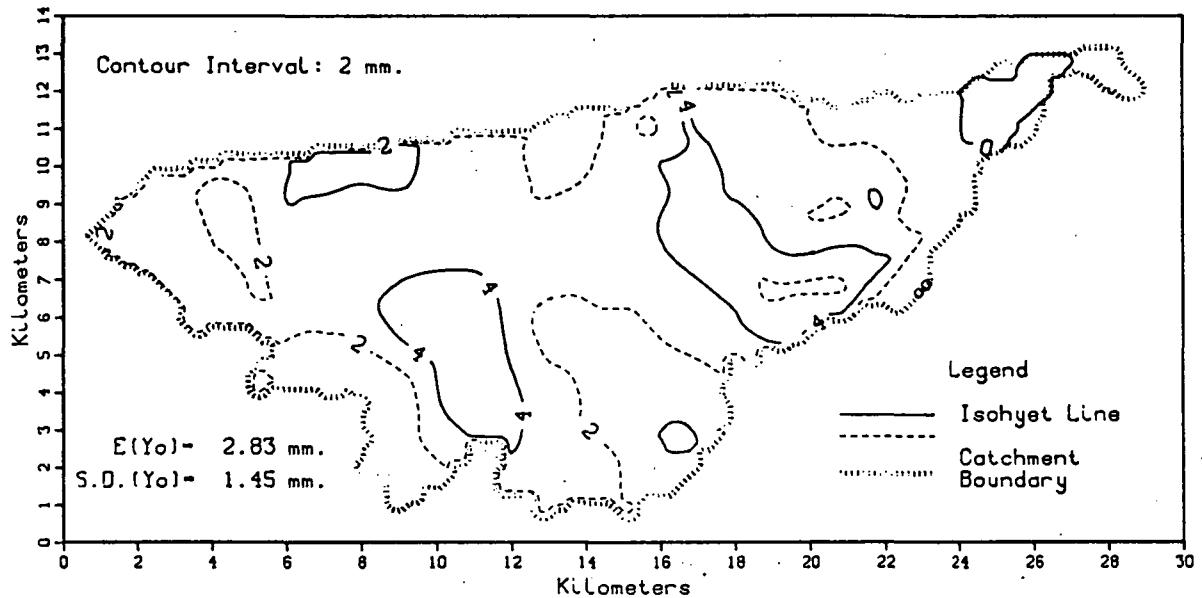
Coef. of Skewness of Point Depth: $S.C.(Y) = 6.119$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.059	0.0	1.000	0.00	1.000
2	0.020	0.2	0.981	0.04	0.718
3	0.010	0.4	0.925	0.16	0.461
4	0.005	0.6	0.840	0.36	0.349
5	0.003	0.8	0.738	0.64	0.307
6	0.002	1.0	0.631	1.00	0.266
7	0.001	1.2	0.553	1.44	0.224
8	0.001	1.4	0.491	1.96	0.184
9	0.000	1.6	0.430	2.56	0.148
		1.8	0.366	3.24	0.117
		2.0	0.305	4.00	0.092
		2.2	0.251	4.84	0.073
		2.4	0.202	5.76	0.058
		2.6	0.156	6.76	0.046
		2.8	0.121	7.84	0.036
		3.0	0.097	9.00	0.029
		3.2	0.080	10.24	0.023
		3.4	0.067	11.56	0.018
		3.6	0.059	12.96	0.014
		3.8	0.052	14.44	0.011
		4.0	0.048	16.00	0.009
		4.2	0.049	17.64	0.007
		4.4	0.056	19.36	0.005
		4.6	0.062	21.16	0.003
		4.8	0.063	23.04	0.001
		5.0	0.065	25.00	0.000
		5.2	0.065	27.04	0.000
		5.4	0.062	29.16	0.000
		5.6	0.053	31.36	0.000
		5.8	0.044	33.64	0.000
		6.0	0.034	36.00	0.000

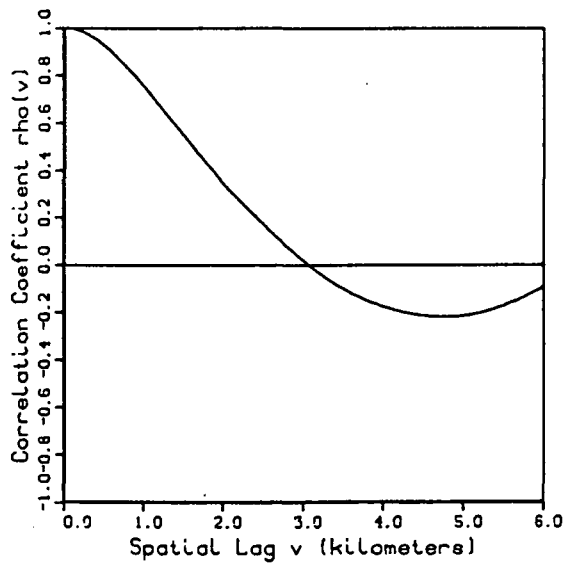
Walnut Gulch, Arizona

Ac=154.21 sq.km.

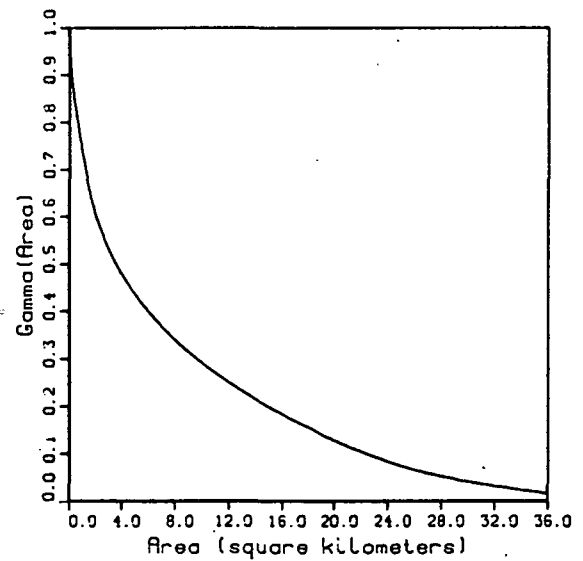
Storm Day
Aug 19, 1976



Spatial Correlation



Variance Function



Storm Day Aug 19 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.021$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.979$

Expected Value of Point Depth (mm.): $E(Y) = 2.776$

Variance of Point Depth (mm. sq.): $Var(Y) = 2.013$

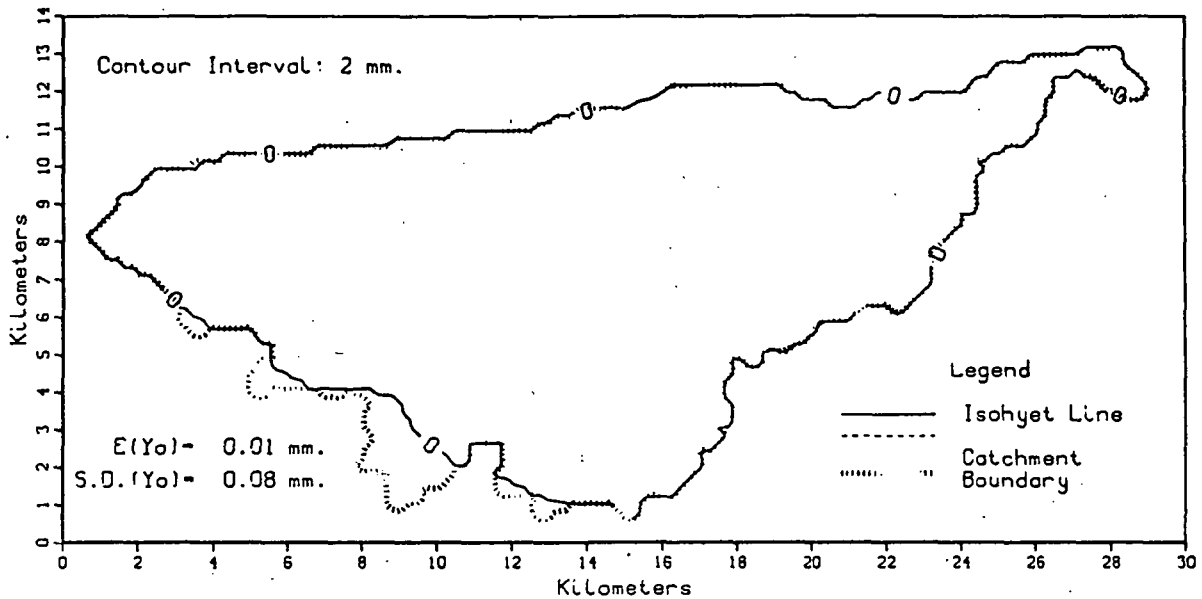
Coef. of Skewness of Point Depth: $S.C.(Y) = -0.027$

Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	0.879	0.0	1.000	0.00	1.000
2	0.718	0.2	0.987	0.04	0.961
3	0.477	0.4	0.950	0.16	0.913
4	0.182	0.6	0.896	0.36	0.859
5	0.069	0.8	0.828	0.64	0.802
6	0.006	1.0	0.752	1.00	0.739
7	0.000	1.2	0.670	1.44	0.672
		1.4	0.587	1.96	0.610
		1.6	0.503	2.56	0.560
		1.8	0.421	3.24	0.516
		2.0	0.343	4.00	0.476
		2.2	0.271	4.84	0.439
		2.4	0.202	5.76	0.405
		2.6	0.136	6.76	0.372
		2.8	0.074	7.84	0.340
		3.0	0.015	9.00	0.311
		3.2	-0.039	10.24	0.283
		3.4	-0.085	11.56	0.256
		3.6	-0.124	12.96	0.230
		3.8	-0.155	14.44	0.205
		4.0	-0.179	16.00	0.181
		4.2	-0.199	17.64	0.157
		4.4	-0.214	19.36	0.134
		4.6	-0.221	21.16	0.111
		4.8	-0.222	23.04	0.091
		5.0	-0.216	25.00	0.072
		5.2	-0.203	27.04	0.057
		5.4	-0.184	29.16	0.044
		5.6	-0.158	31.36	0.033
		5.8	-0.127	33.64	0.024
		6.0	-0.092	36.00	0.015

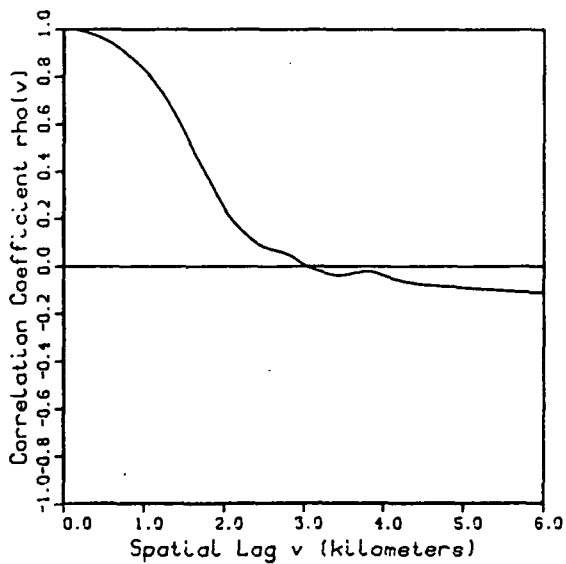
Walnut Gulch, Arizona

Ac=154.21 sq.km.

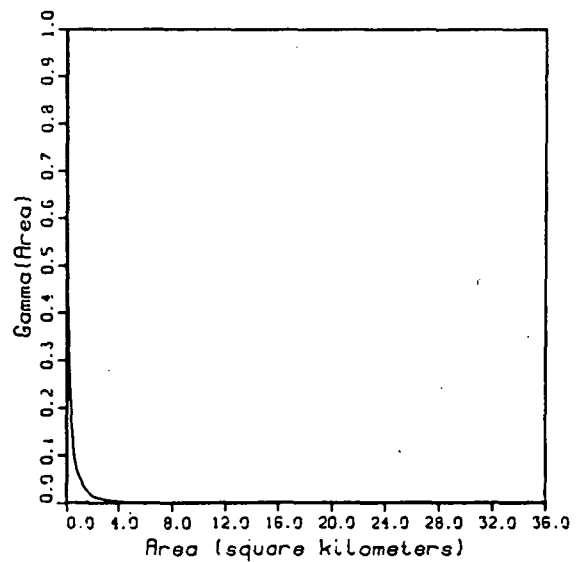
Storm Day
Aug 21, 1976



Spatial Correlation



Variance Function



Storm Day Aug 21 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.970$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.030$

Expected Value of Point Depth (mm.): $E(Y) = 0.013$

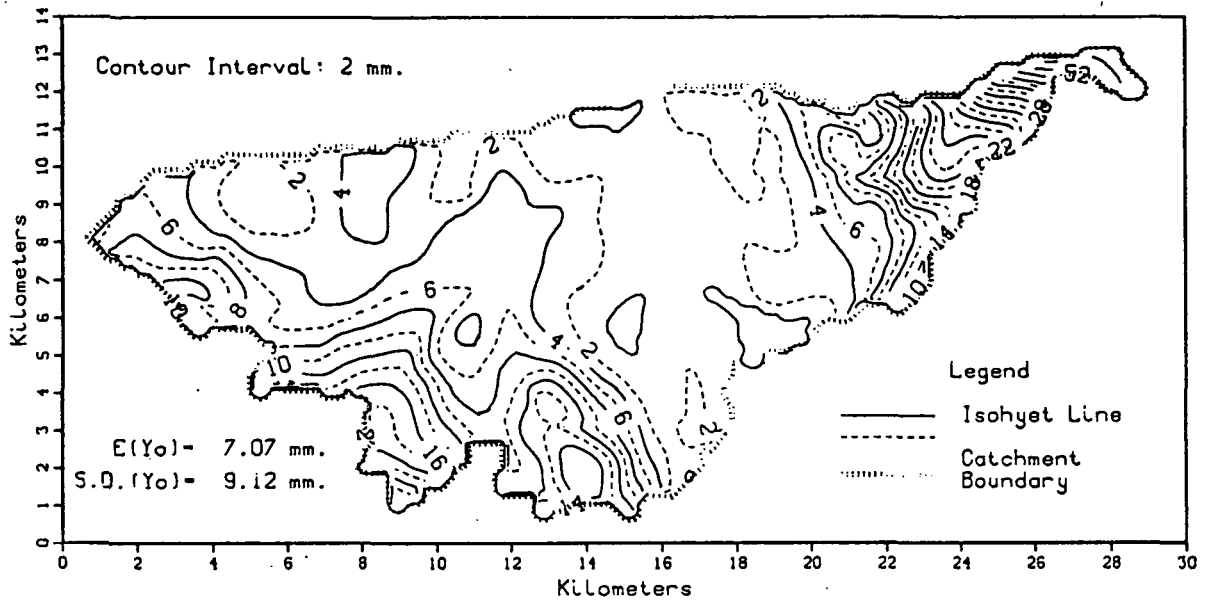
Variance of Point Depth (mm. sq.): $Var(Y) = 0.009$

Coef. of Skewness of Point Depth: $S.C.(Y) = 9.447$

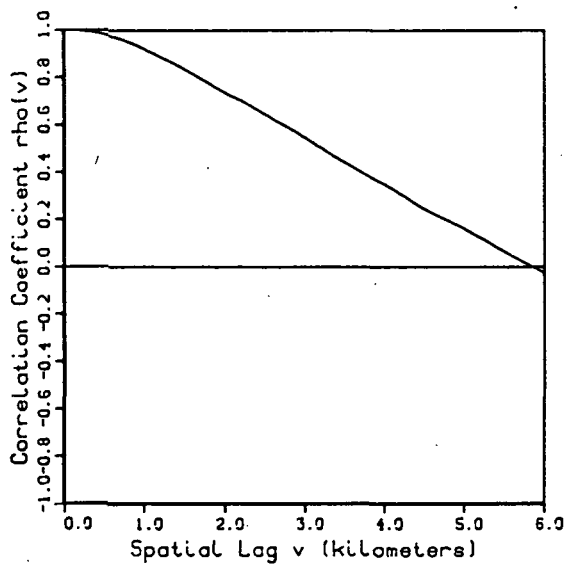
Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	0.001	0.0	1.000	0.00	1.000
2	0.000	0.2	0.992	0.04	0.641
		0.4	0.970	0.16	0.367
		0.6	0.936	0.36	0.201
		0.8	0.886	0.64	0.090
		1.0	0.824	1.00	0.053
		1.2	0.739	1.44	0.030
		1.4	0.626	1.96	0.014
		1.6	0.492	2.56	0.007
		1.8	0.363	3.24	0.004
		2.0	0.236	4.00	0.002
		2.2	0.152	4.84	0.001
		2.4	0.093	5.76	0.000
		2.6	0.066	6.76	0.000
		2.8	0.045	7.84	0.000
		3.0	0.000	9.00	0.000
		3.2	-0.025	10.24	0.000
		3.4	-0.043	11.56	0.000
		3.6	-0.032	12.96	0.000
		3.8	-0.022	14.44	0.000
		4.0	-0.046	16.00	0.000
		4.2	-0.064	17.64	0.000
		4.4	-0.078	19.36	0.000
		4.6	-0.086	21.16	0.000
		4.8	-0.091	23.04	0.000
		5.0	-0.095	25.00	0.000
		5.2	-0.100	27.04	0.000
		5.4	-0.105	29.16	0.000
		5.6	-0.111	31.36	0.000
		5.8	-0.115	33.64	0.000
		6.0	-0.115	36.00	0.000

Walnut Gulch, Arizona
Ac=154.21 sq.km.

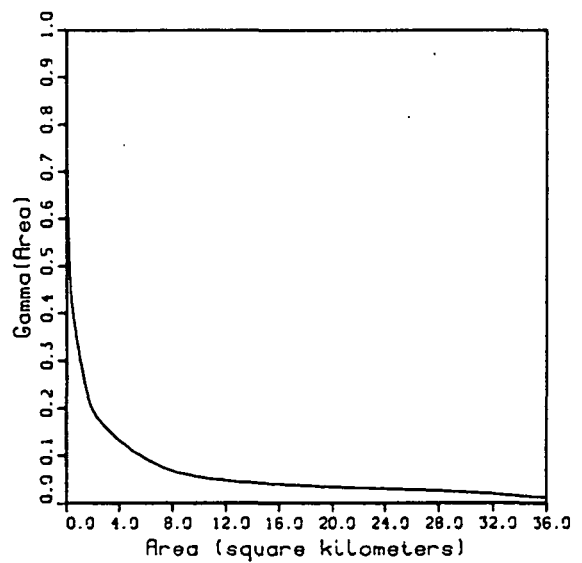
Storm Day
Aug 22, 1976



Spatial Correlation



Variance Function



Storm Day Aug 22 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.019$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.981$

Expected Value of Point Depth (mm.): $E(Y) = 7.481$

Variance of Point Depth (mm. sq.): $Var(Y) = 92.770$

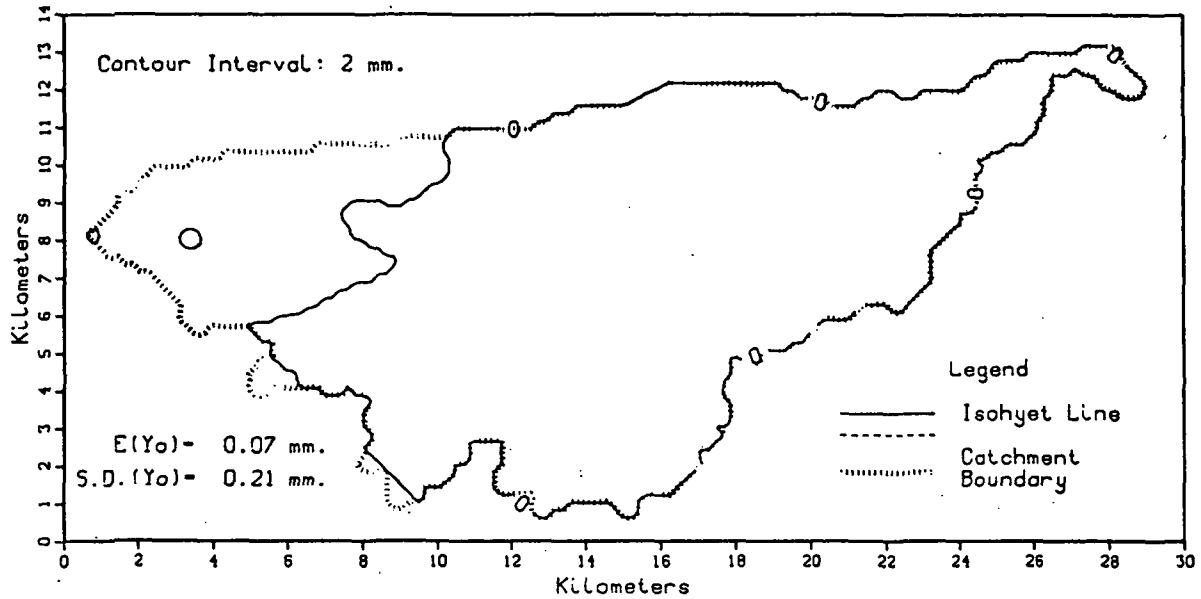
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.341$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y>y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.899	0.0	1.000	0.00	1.000
3	0.614	0.2	0.997	0.04	0.775
5	0.423	0.4	0.987	0.16	0.565
7	0.318	0.6	0.971	0.36	0.437
9	0.250	0.8	0.948	0.64	0.370
11	0.194	1.0	0.917	1.00	0.309
13	0.147	1.2	0.884	1.44	0.244
15	0.112	1.4	0.849	1.96	0.197
17	0.085	1.6	0.810	2.56	0.170
19	0.066	1.8	0.771	3.24	0.150
21	0.057	2.0	0.730	4.00	0.130
23	0.050	2.2	0.697	4.84	0.112
25	0.044	2.4	0.659	5.76	0.095
27	0.036	2.6	0.621	6.76	0.080
29	0.030	2.8	0.582	7.84	0.068
31	0.026	3.0	0.540	9.00	0.060
33	0.023	3.2	0.498	10.24	0.053
35	0.021	3.4	0.456	11.56	0.048
37	0.018	3.6	0.418	12.96	0.044
39	0.017	3.8	0.378	14.44	0.041
41	0.015	4.0	0.345	16.00	0.038
43	0.013	4.2	0.304	17.64	0.036
45	0.012	4.4	0.259	19.36	0.034
47	0.011	4.6	0.222	21.16	0.032
49	0.010	4.8	0.192	23.04	0.030
51	0.009	5.0	0.156	25.00	0.029
53	0.009	5.2	0.119	27.04	0.026
55	0.008	5.4	0.079	29.16	0.023
57	0.008	5.6	0.041	31.36	0.020
59	0.007	5.8	0.005	33.64	0.015
61	0.006	6.0	-.032	36.00	0.012
63	0.005				
65	0.004				
67	0.004				
69	0.002				
71	0.001				
73	0.001				
75	0.000				

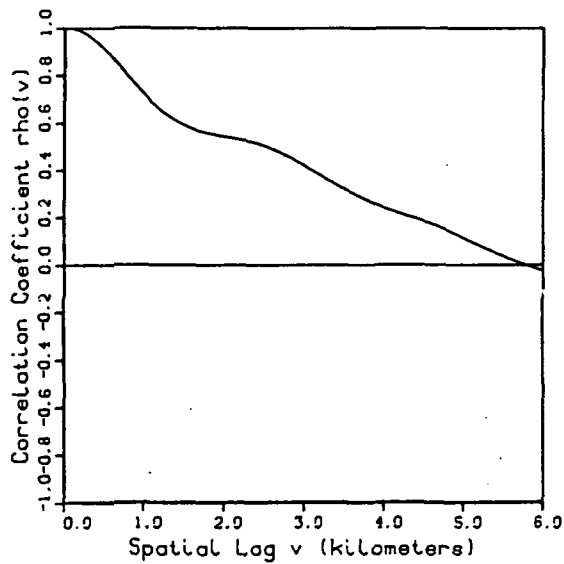
Walnut Gulch, Arizona

Ac=154.21 sq.km.

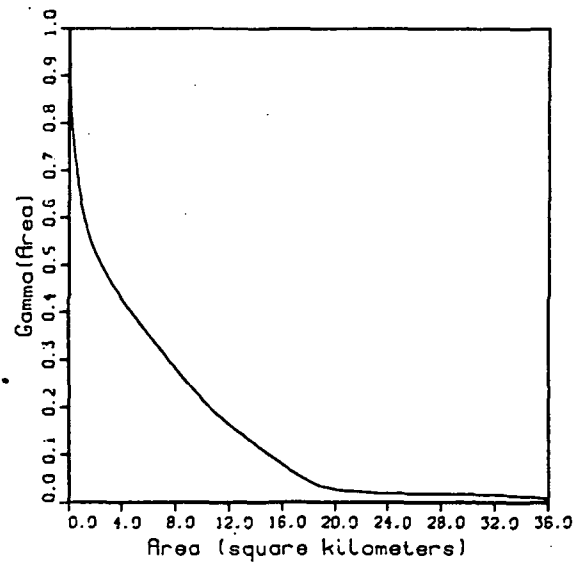
Storm Day
Aug 23, 1976



Spatial Correlation



Variance Function



Storm Day Aug 23 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.817$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.183$

Expected Value of Point Depth (mm.): $E(Y) = 0.065$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.029$

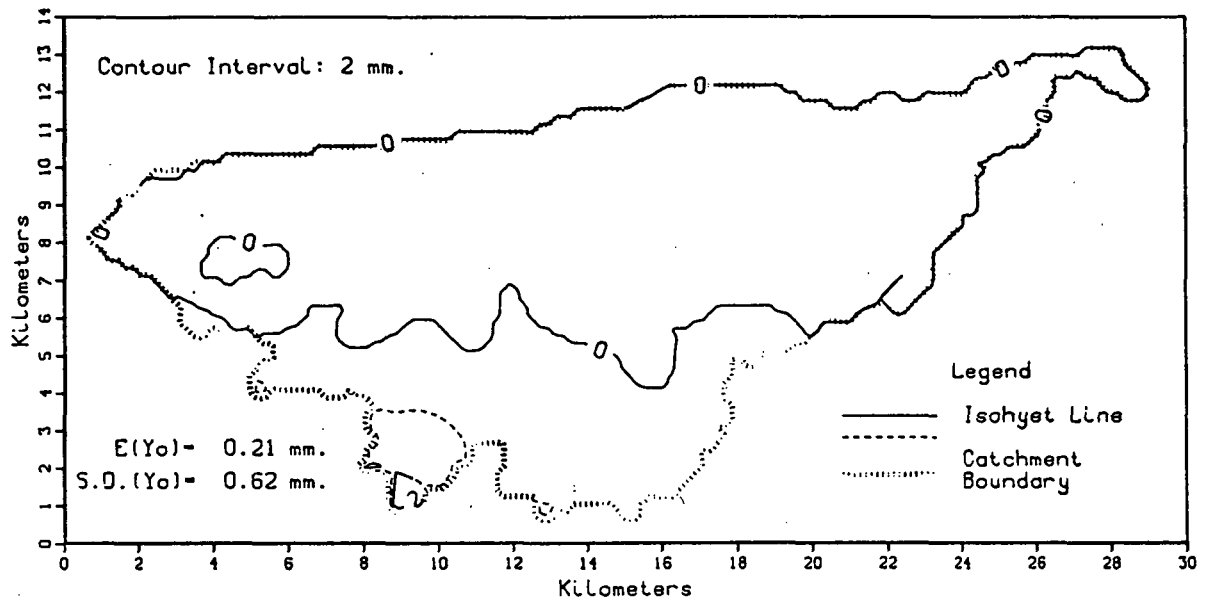
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.136$

Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	0.004	0.0	1.000	0.00	1.000
2	0.000	0.2	0.983	0.04	0.930
		0.4	0.938	0.16	0.851
		0.6	0.870	0.36	0.769
		0.8	0.791	0.64	0.691
		1.0	0.715	1.00	0.624
		1.2	0.650	1.44	0.570
		1.4	0.602	1.96	0.527
		1.6	0.571	2.56	0.490
		1.8	0.551	3.24	0.456
		2.0	0.538	4.00	0.425
		2.2	0.526	4.84	0.393
		2.4	0.510	5.76	0.358
		2.6	0.486	6.76	0.323
		2.8	0.453	7.84	0.284
		3.0	0.414	9.00	0.245
		3.2	0.374	10.24	0.207
		3.4	0.335	11.56	0.172
		3.6	0.298	12.96	0.141
		3.8	0.266	14.44	0.110
		4.0	0.236	16.00	0.078
		4.2	0.212	17.64	0.047
		4.4	0.191	19.36	0.029
		4.6	0.168	21.16	0.023
		4.8	0.141	23.04	0.019
		5.0	0.109	25.00	0.018
		5.2	0.076	27.04	0.017
		5.4	0.046	29.16	0.016
		5.6	0.019	31.36	0.015
		5.8	-.007	33.64	0.013
		6.0	-.030	36.00	0.006

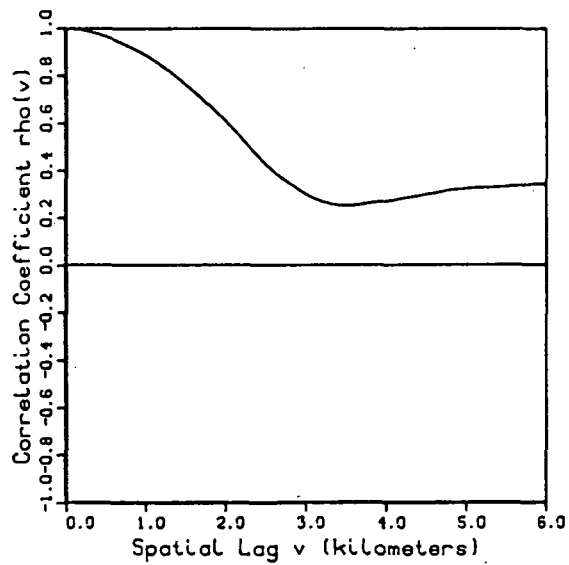
Walnut Gulch, Arizona

$A_c = 154.21 \text{ sq. km.}$

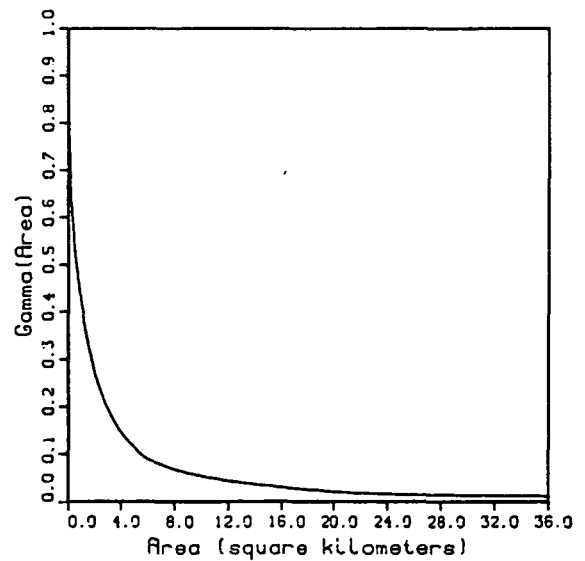
Storm Day
Aug 24, 1976



Spatial Correlation



Variance Function



Storm Day Aug 24 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.702$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.298$

Expected Value of Point Depth (mm.): $E(Y) = 0.243$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.414$

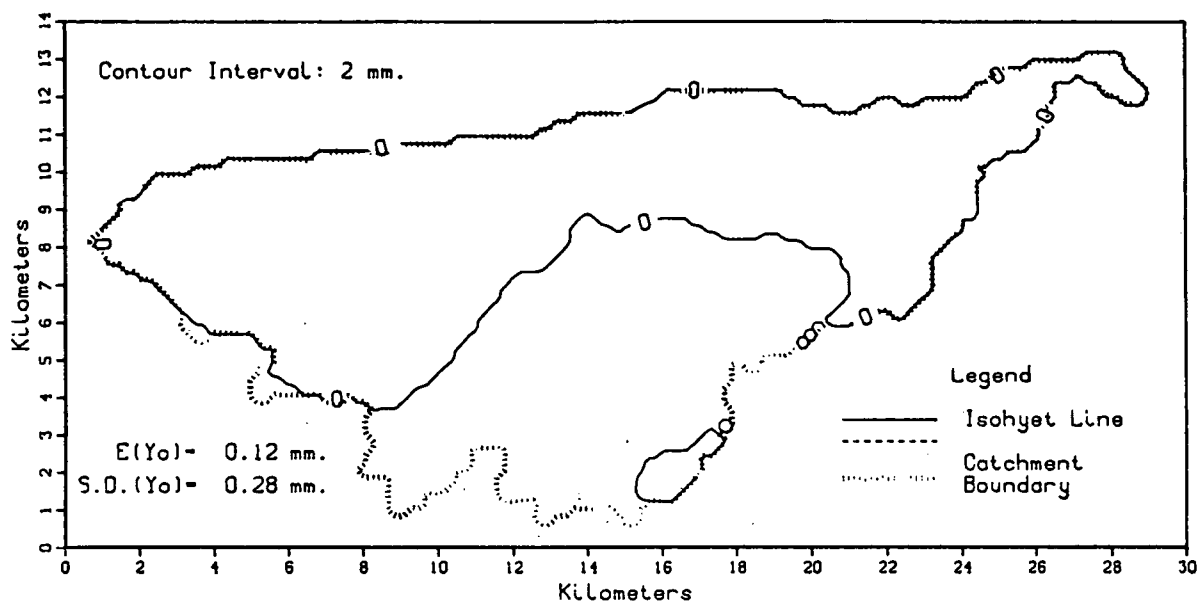
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.881$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.080	0.0	1.000	0.00	1.000
2	0.026	0.2	0.992	0.04	0.845
3	0.013	0.4	0.974	0.16	0.708
4	0.003	0.6	0.949	0.36	0.597
5	0.000	0.8	0.918	0.64	0.498
6	0.000	1.0	0.882	1.00	0.422
		1.2	0.836	1.44	0.348
		1.4	0.784	1.96	0.277
		1.6	0.727	2.56	0.222
		1.8	0.668	3.24	0.180
		2.0	0.603	4.00	0.143
		2.2	0.532	4.84	0.116
		2.4	0.456	5.76	0.092
		2.6	0.391	6.76	0.079
		2.8	0.341	7.84	0.068
		3.0	0.297	9.00	0.059
		3.2	0.267	10.24	0.051
		3.4	0.251	11.56	0.045
		3.6	0.253	12.96	0.039
		3.8	0.264	14.44	0.034
		4.0	0.271	16.00	0.029
		4.2	0.283	17.64	0.025
		4.4	0.293	19.36	0.021
		4.6	0.305	21.16	0.018
		4.8	0.318	23.04	0.016
		5.0	0.325	25.00	0.014
		5.2	0.329	27.04	0.014
		5.4	0.330	29.16	0.013
		5.6	0.336	31.36	0.012
		5.8	0.342	33.64	0.011
		6.0	0.341	36.00	0.011

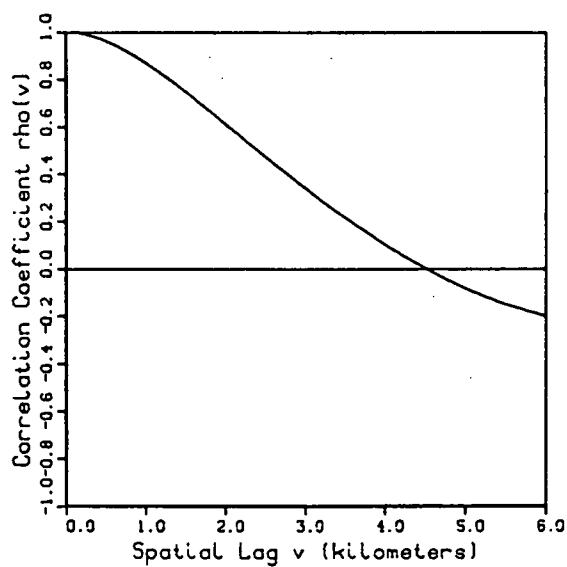
Walnut Gulch, Arizona

Ac=154.21 sq.km.

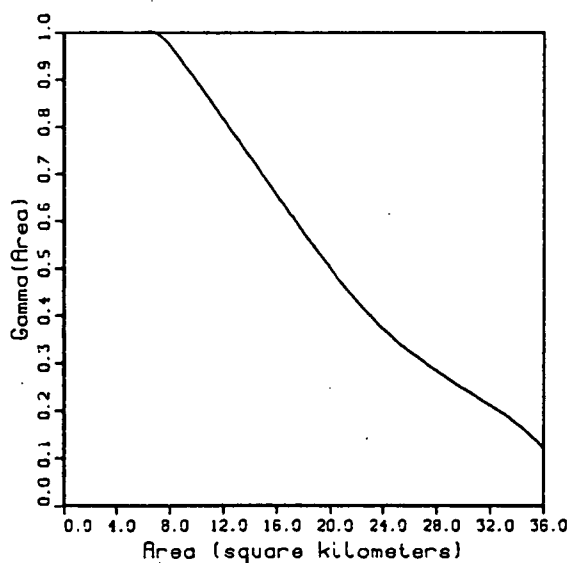
Storm Day
Aug 25, 1976



Spatial Correlation



Variance Function



Storm Day Aug 25 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.629$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.371$

Expected Value of Point Depth (mm.): $E(Y) = 0.179$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.098$

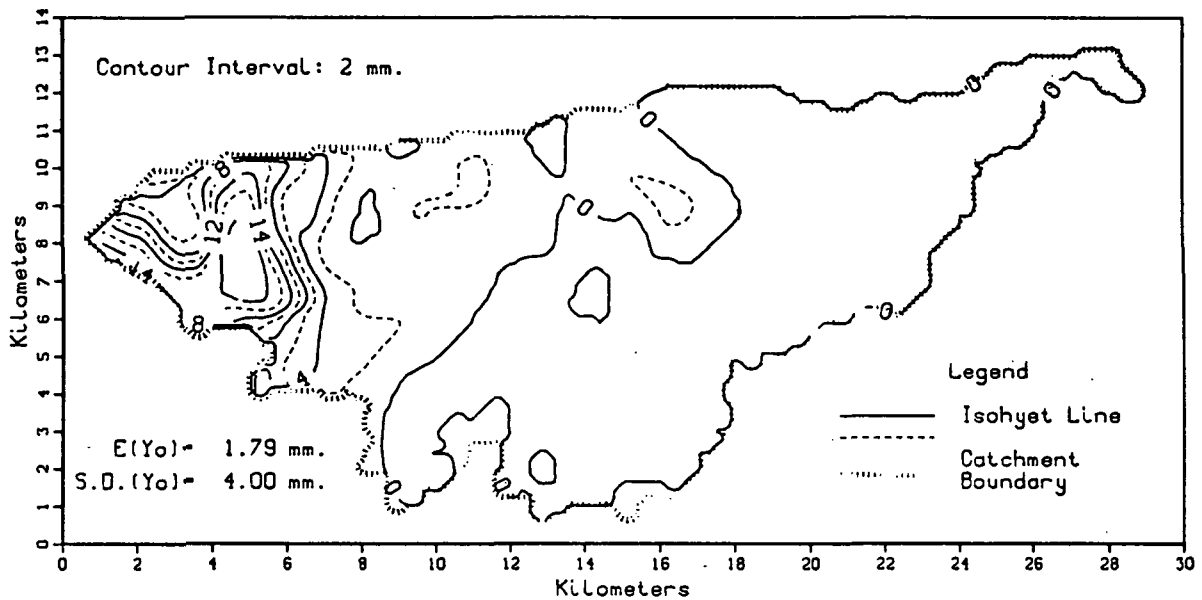
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.739$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.034	0.0	1.000	0.00	1.000
2	0.000	0.2	0.992	0.04	1.033
		0.4	0.972	0.16	1.063
		0.6	0.943	0.36	1.086
		0.8	0.907	0.64	1.103
		1.0	0.864	1.00	1.116
		1.2	0.818	1.44	1.124
		1.4	0.768	1.96	1.126
		1.6	0.715	2.56	1.121
		1.8	0.661	3.24	1.111
		2.0	0.605	4.00	1.094
		2.2	0.550	4.84	1.073
		2.4	0.495	5.76	1.046
		2.6	0.441	6.76	1.013
		2.8	0.388	7.84	0.975
		3.0	0.335	9.00	0.932
		3.2	0.285	10.24	0.885
		3.4	0.236	11.56	0.832
		3.6	0.188	12.96	0.776
		3.8	0.142	14.44	0.716
		4.0	0.098	16.00	0.653
		4.2	0.056	17.64	0.588
		4.4	0.017	19.36	0.522
		4.6	-.020	21.16	0.458
		4.8	-.055	23.04	0.398
		5.0	-.087	25.00	0.344
		5.2	-.117	27.04	0.301
		5.4	-.143	29.16	0.260
		5.6	-.166	31.36	0.221
		5.8	-.186	33.64	0.179
		6.0	-.205	36.00	0.118

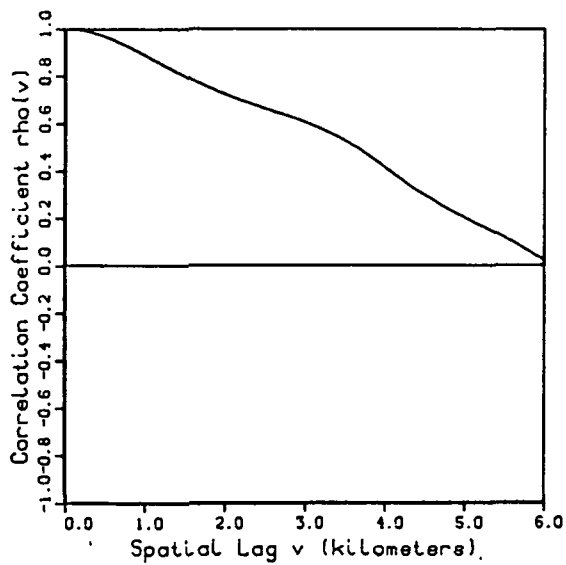
Walnut Gulch, Arizona

Ac=154.21 sq.km.

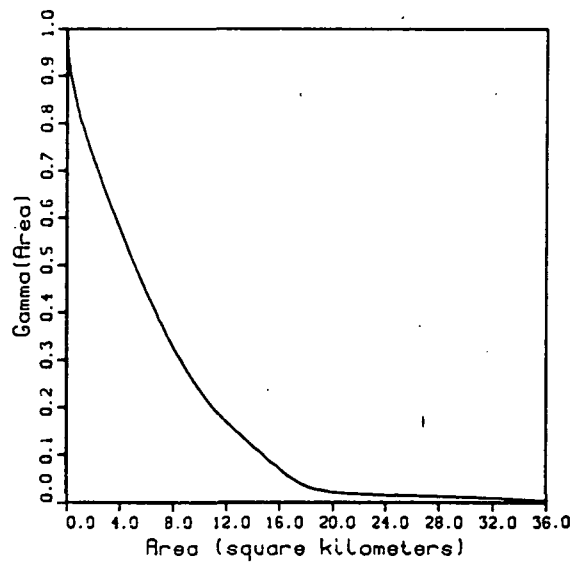
Storm Day
Aug 26, 1976



Spatial Correlation



Variance Function



Storm Day Aug 26 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.539$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.461$

Expected Value of Point Depth (mm.): $E(Y) = 1.726$

Variance of Point Depth (mm. sq.): $Var(Y) = 14.643$

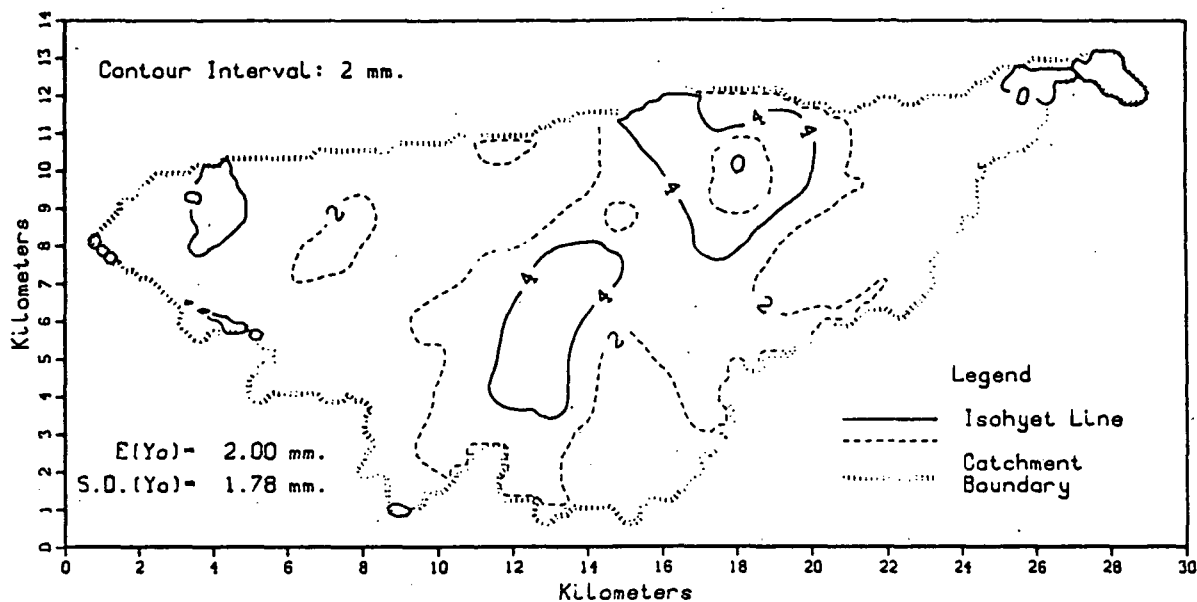
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.637$

Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	0.264	0.0	1.000	0.00	1.000
2	0.186	0.2	0.994	0.04	0.965
3	0.152	0.4	0.977	0.16	0.929
4	0.135	0.6	0.951	0.36	0.893
5	0.119	0.8	0.920	0.64	0.855
6	0.103	1.0	0.885	1.00	0.813
7	0.093	1.2	0.848	1.44	0.771
8	0.084	1.4	0.813	1.96	0.729
9	0.076	1.6	0.779	2.56	0.681
10	0.069	1.8	0.748	3.24	0.630
11	0.061	2.0	0.719	4.00	0.575
12	0.054	2.2	0.694	4.84	0.516
13	0.046	2.4	0.671	5.76	0.455
14	0.037	2.6	0.648	6.76	0.394
15	0.026	2.8	0.626	7.84	0.333
16	0.015	3.0	0.601	9.00	0.276
17	0.004	3.2	0.574	10.24	0.225
18	0.000	3.4	0.542	11.56	0.180
		3.6	0.504	12.96	0.143
		3.8	0.460	14.44	0.106
		4.0	0.412	16.00	0.069
		4.2	0.362	17.64	0.037
		4.4	0.316	19.36	0.023
		4.6	0.275	21.16	0.019
		4.8	0.236	23.04	0.015
		5.0	0.201	25.00	0.014
		5.2	0.167	27.04	0.012
		5.4	0.135	29.16	0.011
		5.6	0.100	31.36	0.008
		5.8	0.061	33.64	0.006
		6.0	0.021	36.00	0.002

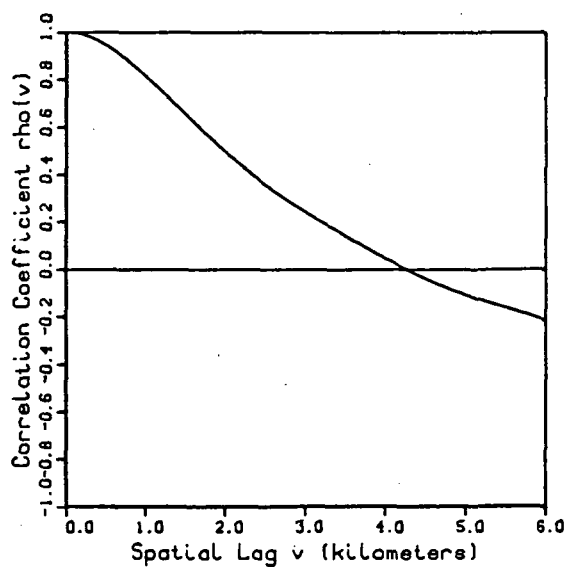
Walnut Gulch, Arizona

Ac=154.21 sq.km.

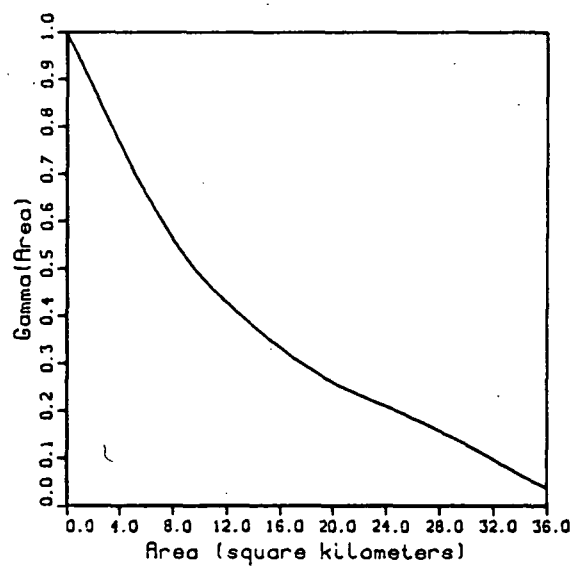
Storm Day
Aug 27, 1976



Spatial Correlation



Variance Function



Storm Day Aug 27 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.023$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.977$

Expected Value of Point Depth (mm.): $E(Y) = 2.055$

Variance of Point Depth (mm. sq.): $Var(Y) = 2.480$

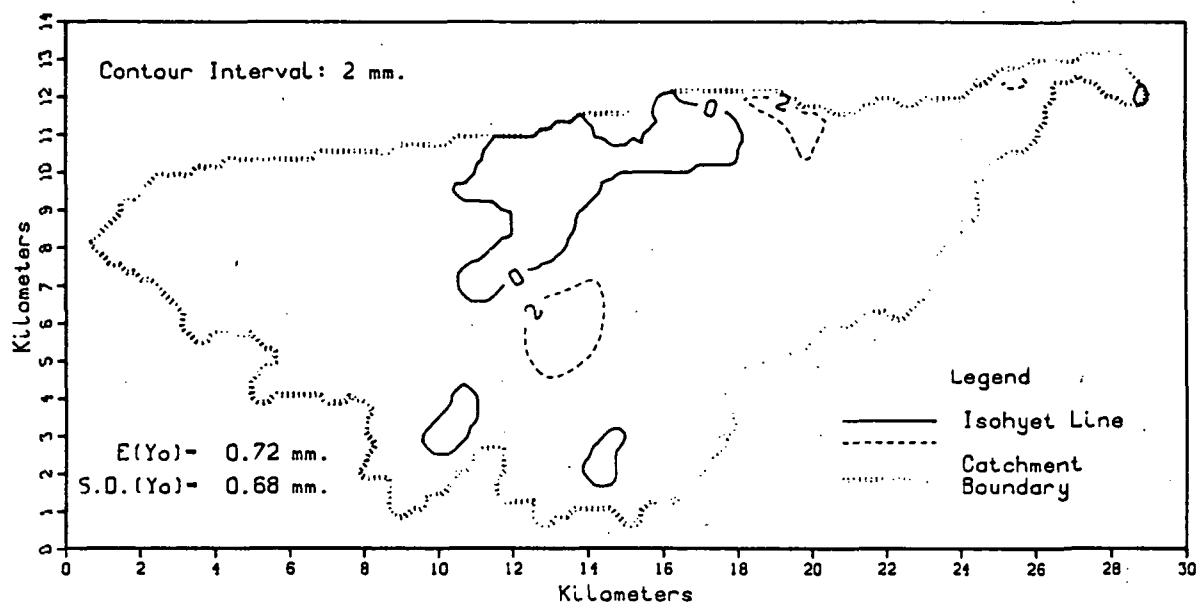
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.829$

Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	0.690	0.0	1.000	0.00	1.000
2	0.439	0.2	0.990	0.04	0.998
3	0.284	0.4	0.963	0.16	0.991
4	0.138	0.6	0.922	0.36	0.979
5	0.039	0.8	0.871	0.64	0.963
6	0.017	1.0	0.812	1.00	0.941
7	0.006	1.2	0.750	1.44	0.915
8	0.001	1.4	0.685	1.96	0.884
9	0.000	1.6	0.620	2.56	0.849
		1.8	0.557	3.24	0.808
		2.0	0.495	4.00	0.764
		2.2	0.437	4.84	0.716
		2.4	0.382	5.76	0.667
		2.6	0.331	6.76	0.617
		2.8	0.284	7.84	0.567
		3.0	0.240	9.00	0.520
		3.2	0.199	10.24	0.477
		3.4	0.159	11.56	0.438
		3.6	0.120	12.96	0.402
		3.8	0.082	14.44	0.367
		4.0	0.045	16.00	0.331
		4.2	0.008	17.64	0.298
		4.4	-.027	19.36	0.268
		4.6	-.058	21.16	0.243
		4.8	-.087	23.04	0.219
		5.0	-.112	25.00	0.196
		5.2	-.135	27.04	0.169
		5.4	-.156	29.16	0.139
		5.6	-.177	31.36	0.107
		5.8	-.198	33.64	0.070
		6.0	-.221	36.00	0.038

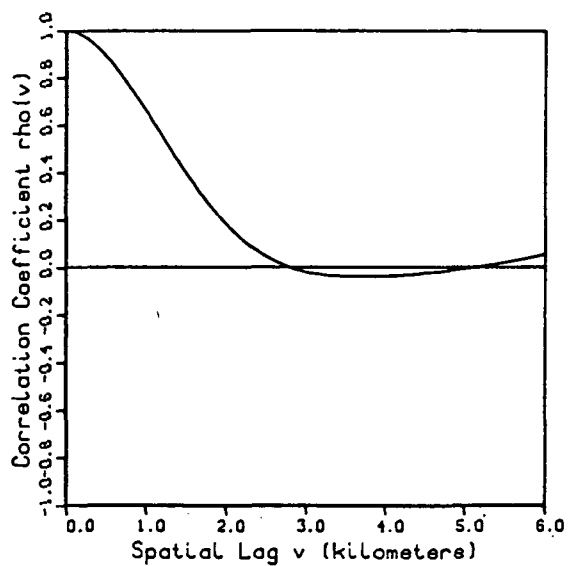
Walnut Gulch, Arizona

Ac=154.21 sq.km.

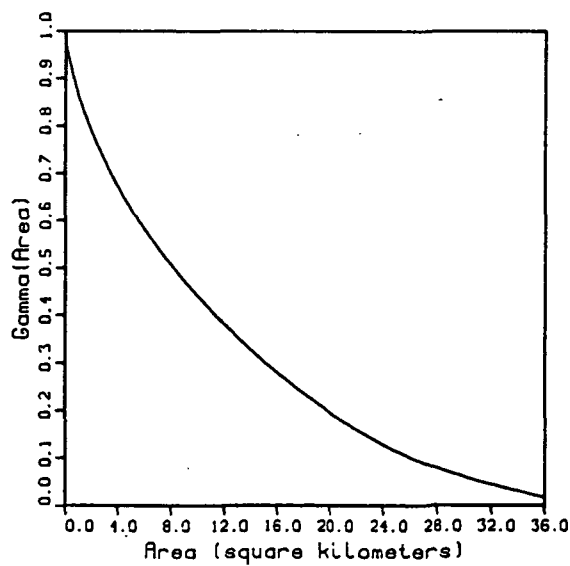
Storm Day
Aug 31, 1976



Spatial Correlation



Variance Function



Storm Day Aug 31 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.094$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.906$

Expected Value of Point Depth (mm.): $E(Y) = 0.789$

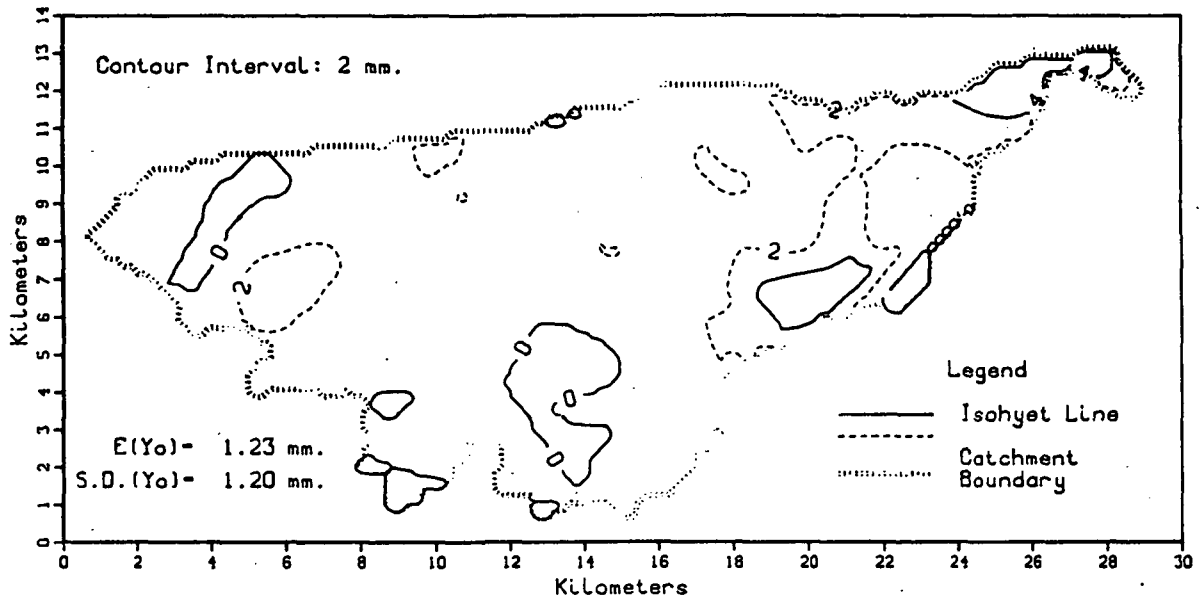
Variance of Point Depth (mm. sq.): $Var(Y) = 0.364$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.117$

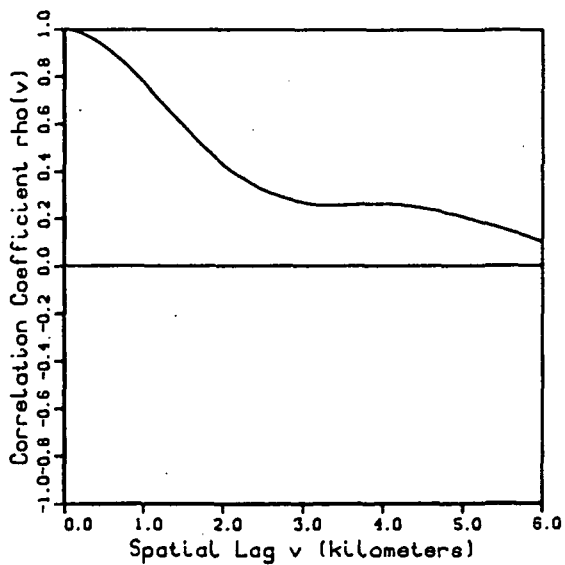
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c(Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.322	0.0	1.000	0.00	1.000
2	0.035	0.2	0.979	0.04	0.985
3	0.010	0.4	0.925	0.16	0.961
4	0.000	0.6	0.850	0.36	0.933
		0.8	0.759	0.64	0.900
		1.0	0.657	1.00	0.864
		1.2	0.552	1.44	0.826
		1.4	0.447	1.96	0.788
		1.6	0.349	2.56	0.749
		1.8	0.259	3.24	0.710
		2.0	0.181	4.00	0.670
		2.2	0.117	4.84	0.629
		2.4	0.065	5.76	0.589
		2.6	0.026	6.76	0.549
		2.8	-0.002	7.84	0.510
		3.0	-0.021	9.00	0.471
		3.2	-0.032	10.24	0.432
		3.4	-0.038	11.56	0.393
		3.6	-0.040	12.96	0.354
		3.8	-0.039	14.44	0.316
		4.0	-0.037	16.00	0.279
		4.2	-0.033	17.64	0.243
		4.4	-0.027	19.36	0.208
		4.6	-0.020	21.16	0.173
		4.8	-0.013	23.04	0.141
		5.0	-0.003	25.00	0.112
		5.2	0.006	27.04	0.088
		5.4	0.016	29.16	0.067
		5.6	0.029	31.36	0.048
		5.8	0.043	33.64	0.032
		6.0	0.058	36.00	0.016

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

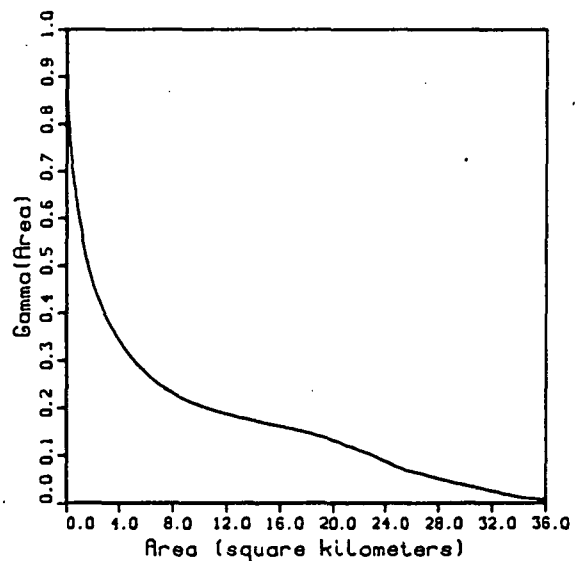
Storm Day
 Sept 1, 1976



Spatial Correlation



Variance Function



Storm Day Sept 1 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.063$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.937$

Expected Value of Point Depth (mm.): $E(Y) = 1.253$

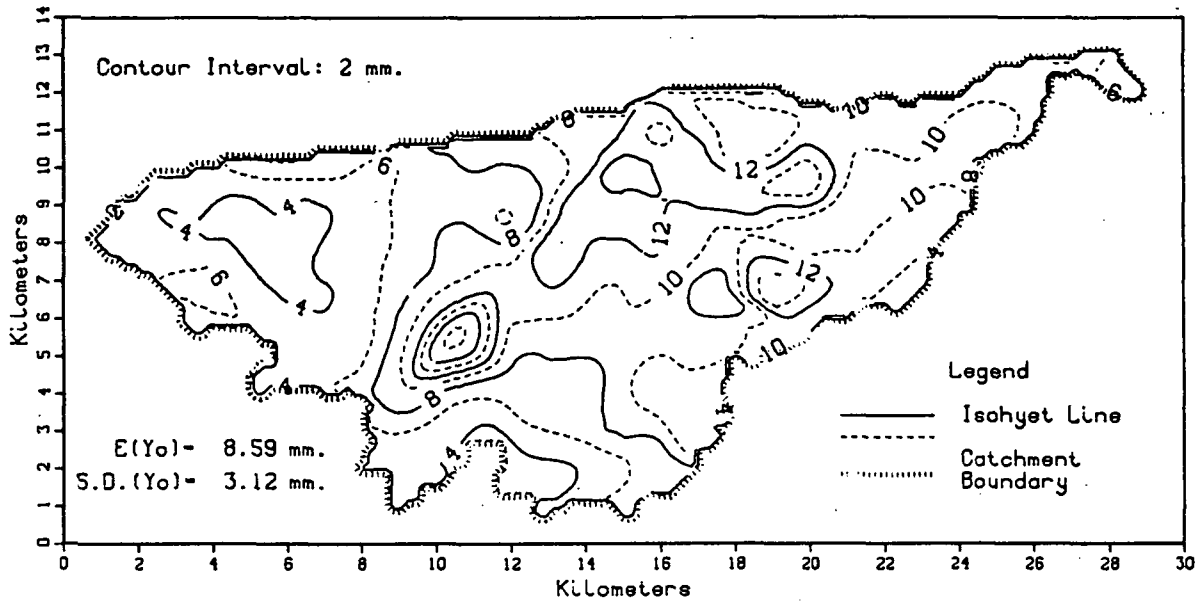
Variance of Point Depth (mm. sq.): $Var(Y) = 1.273$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.398$

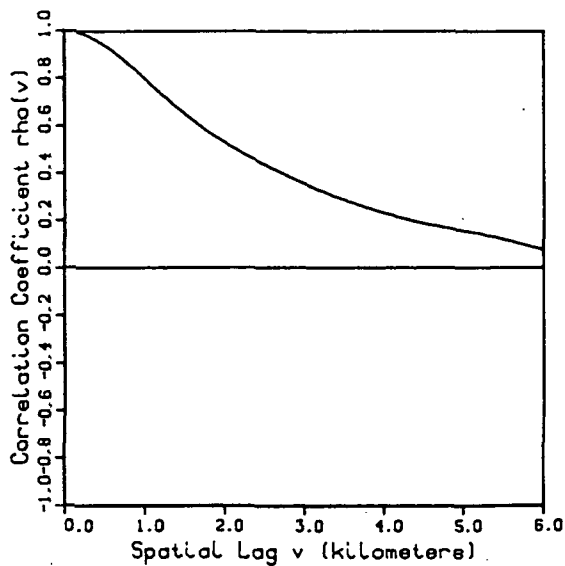
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.524	0.0	1.000	0.00	1.000
2	0.176	0.2	0.987	0.04	0.915
3	0.079	0.4	0.953	0.16	0.825
4	0.039	0.6	0.903	0.36	0.744
5	0.007	0.8	0.843	0.64	0.673
6	0.000	1.0	0.775	1.00	0.602
7	0.000	1.2	0.702	1.44	0.529
		1.4	0.629	1.96	0.467
		1.6	0.558	2.56	0.421
		1.8	0.491	3.24	0.379
		2.0	0.430	4.00	0.341
		2.2	0.381	4.84	0.307
		2.4	0.339	5.76	0.278
		2.6	0.307	6.76	0.253
		2.8	0.284	7.84	0.232
		3.0	0.267	9.00	0.215
		3.2	0.258	10.24	0.201
		3.4	0.257	11.56	0.189
		3.6	0.260	12.96	0.179
		3.8	0.263	14.44	0.170
		4.0	0.263	16.00	0.160
		4.2	0.258	17.64	0.150
		4.4	0.250	19.36	0.136
		4.6	0.238	21.16	0.119
		4.8	0.223	23.04	0.099
		5.0	0.206	25.00	0.074
		5.2	0.186	27.04	0.058
		5.4	0.165	29.16	0.041
		5.6	0.145	31.36	0.029
		5.8	0.123	33.64	0.014
		6.0	0.102	36.00	0.006

Walnut Gulch, Arizona
Ac=154.21 sq.km.

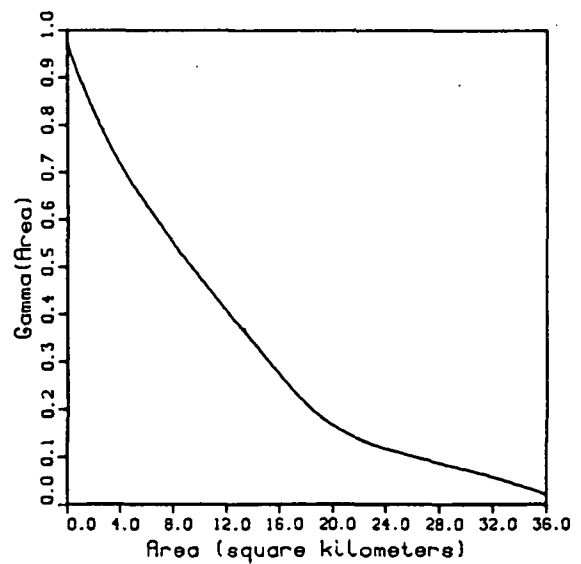
Storm Day
Sept 4, 1976



Spatial Correlation



Variance Function



Storm Day Sept 4 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 8.629$

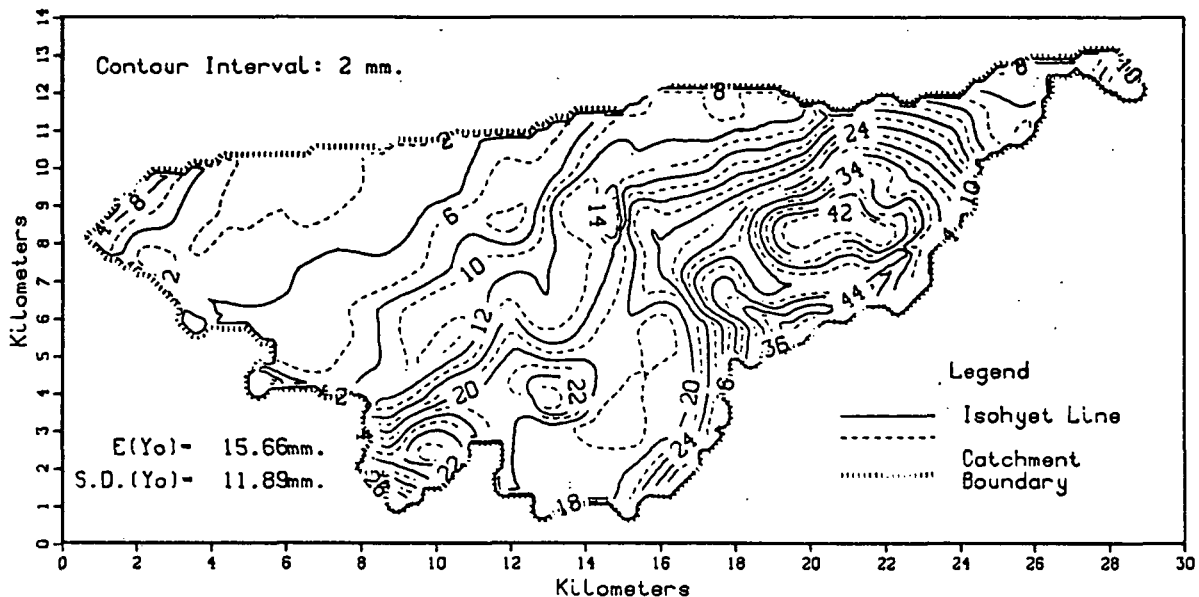
Variance of Point Depth (mm. sq.): $Var(Y) = 9.365$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.127$

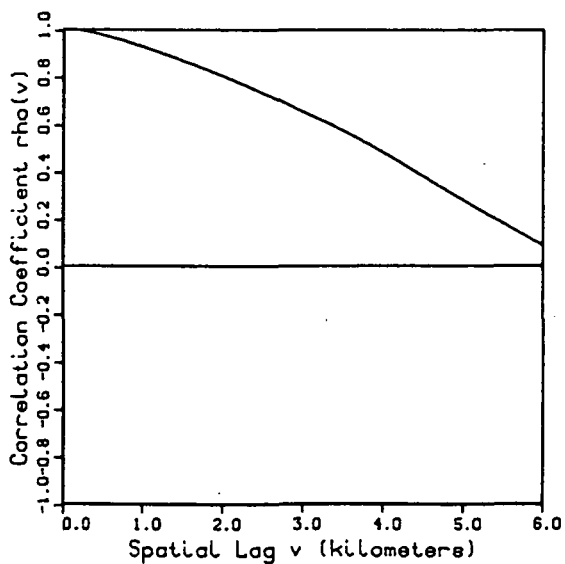
Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.989	0.04	0.983
3	0.996	0.4	0.957	0.16	0.961
4	0.943	0.6	0.911	0.36	0.940
5	0.839	0.8	0.856	0.64	0.918
6	0.755	1.0	0.795	1.00	0.892
7	0.666	1.2	0.733	1.44	0.862
8	0.598	1.4	0.674	1.96	0.828
9	0.502	1.6	0.620	2.56	0.791
10	0.376	1.8	0.571	3.24	0.752
11	0.218	2.0	0.527	4.00	0.714
12	0.132	2.2	0.487	4.84	0.675
13	0.065	2.4	0.450	5.76	0.636
14	0.032	2.6	0.416	6.76	0.596
15	0.015	2.8	0.383	7.84	0.554
16	0.010	3.0	0.353	9.00	0.511
17	0.006	3.2	0.324	10.24	0.466
18	0.003	3.4	0.297	11.56	0.420
19	0.000	3.6	0.273	12.96	0.374
20	0.000	3.8	0.251	14.44	0.324
		4.0	0.229	16.00	0.271
		4.2	0.211	17.64	0.218
		4.4	0.194	19.36	0.176
		4.6	0.179	21.16	0.147
		4.8	0.166	23.04	0.124
		5.0	0.155	25.00	0.108
		5.2	0.142	27.04	0.092
		5.4	0.127	29.16	0.077
		5.6	0.111	31.36	0.061
		5.8	0.093	33.64	0.042
		6.0	0.074	36.00	0.020

Walnut Gulch, Arizona
Ac=154.21 sq.km.

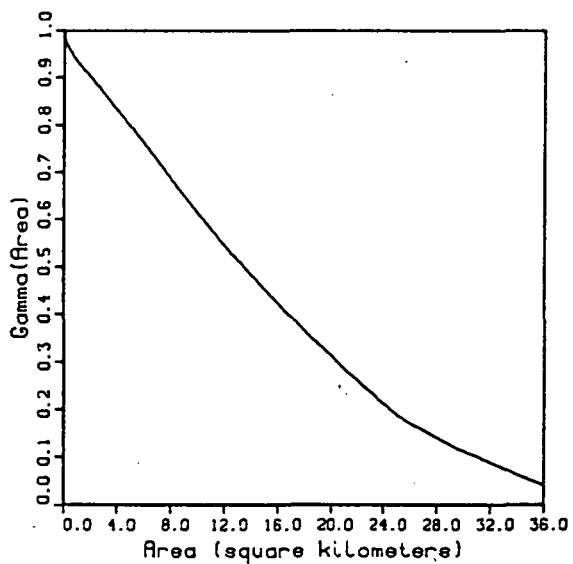
Storm Day
Sept 5, 1976



Spatial Correlation



Variance Function



Storm Day Sept 5 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 16.489$

Variance of Point Depth (mm. sq.): $Var(Y)=125.754$

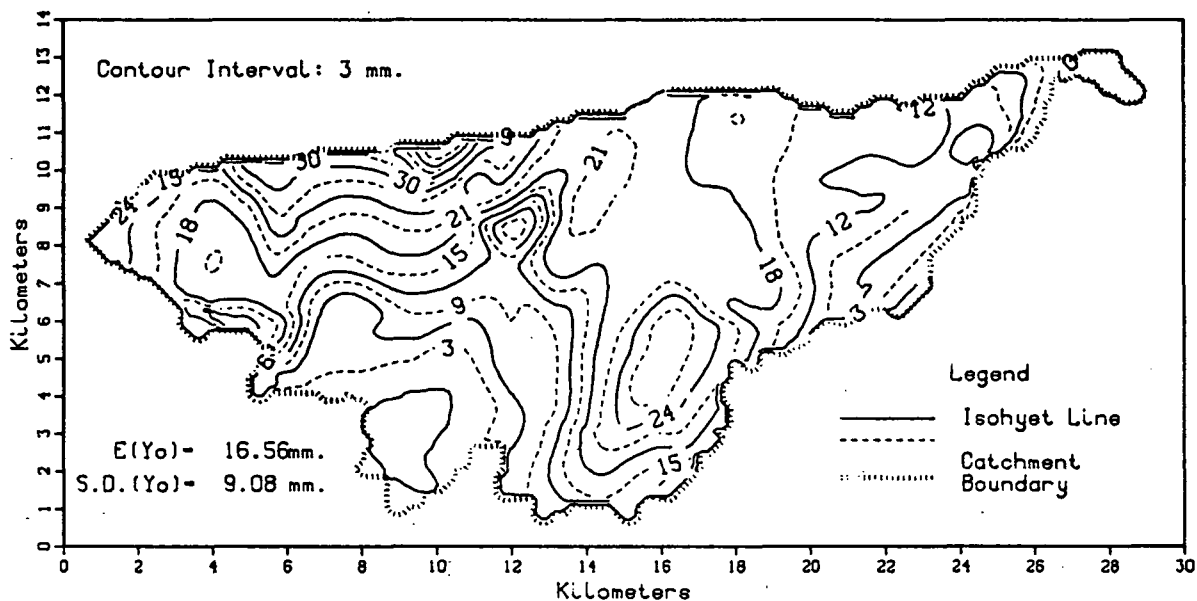
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.611$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.999	0.0	1.000	0.00	1.000
3	0.902	0.2	0.995	0.04	0.987
5	0.802	0.4	0.982	0.16	0.974
7	0.735	0.6	0.965	0.36	0.961
9	0.689	0.8	0.945	0.64	0.946
11	0.626	1.0	0.923	1.00	0.932
13	0.549	1.2	0.900	1.44	0.917
15	0.500	1.4	0.877	1.96	0.900
17	0.459	1.6	0.852	2.56	0.879
19	0.376	1.8	0.827	3.24	0.855
21	0.297	2.0	0.800	4.00	0.829
23	0.250	2.2	0.772	4.84	0.800
25	0.214	2.4	0.742	5.76	0.767
27	0.183	2.6	0.712	6.76	0.730
29	0.157	2.8	0.681	7.84	0.690
31	0.135	3.0	0.650	9.00	0.647
33	0.108	3.2	0.619	10.24	0.603
35	0.080	3.4	0.586	11.56	0.558
37	0.058	3.6	0.552	12.96	0.513
39	0.042	3.8	0.515	14.44	0.468
41	0.028	4.0	0.477	16.00	0.421
43	0.014	4.2	0.438	17.64	0.373
45	0.004	4.4	0.397	19.36	0.327
47	0.002	4.6	0.356	21.16	0.282
		5.0	0.276	25.00	0.187
		5.2	0.237	27.04	0.154
		5.4	0.199	29.16	0.122
		5.6	0.160	31.36	0.096
		5.8	0.123	33.64	0.066
		6.0	0.087	36.00	0.040

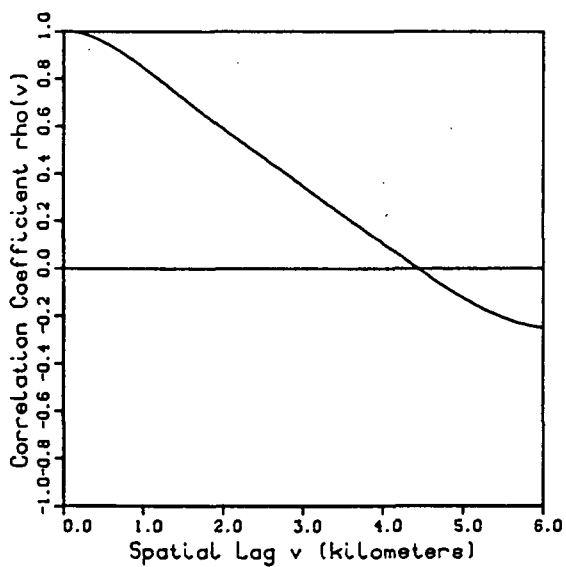
Walnut Gulch, Arizona

Ac=154.21 sq.km.

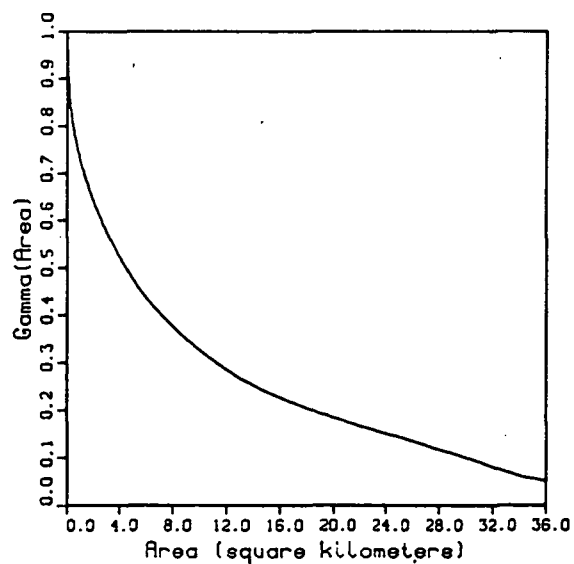
Storm Day
Sept 6, 1976



Spatial Correlation



Variance Function



Storm Day Sept 6 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.030$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.970$

Expected Value of Point Depth (mm.): $E(Y) = 15.068$

Variance of Point Depth (mm. sq.): $Var(Y) = 64.719$

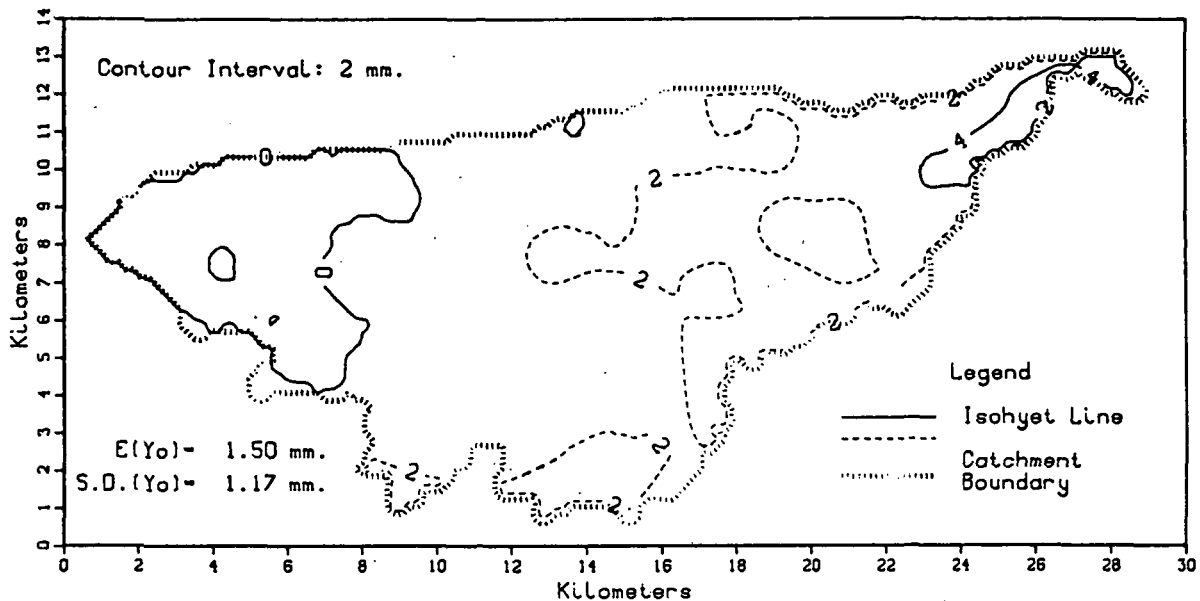
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.118$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.949	0.0	1.000	0.00	1.000
3	0.920	0.2	0.992	0.04	0.936
5	0.875	0.4	0.968	0.16	0.874
7	0.829	0.6	0.933	0.36	0.819
9	0.769	0.8	0.890	0.64	0.772
11	0.717	1.0	0.841	1.00	0.728
13	0.616	1.2	0.789	1.44	0.686
15	0.550	1.4	0.737	1.96	0.644
17	0.458	1.6	0.684	2.56	0.602
19	0.336	1.8	0.633	3.24	0.561
21	0.204	2.0	0.583	4.00	0.520
23	0.138	2.2	0.535	4.84	0.481
25	0.095	2.4	0.487	5.76	0.442
27	0.061	2.6	0.439	6.76	0.409
29	0.032	2.8	0.392	7.84	0.378
31	0.019	3.0	0.342	9.00	0.347
33	0.012	3.2	0.293	10.24	0.319
35	0.009	3.4	0.244	11.56	0.292
37	0.007	3.6	0.197	12.96	0.267
39	0.005	3.8	0.149	14.44	0.245
41	0.004	4.0	0.101	16.00	0.225
43	0.003	4.2	0.053	17.64	0.207
45	0.002	4.4	0.003	19.36	0.189
47	0.000	4.6	-.044	21.16	0.173
		4.8	-.089	23.04	0.157
		5.0	-.130	25.00	0.142
		5.2	-.167	27.04	0.124
		5.4	-.200	29.16	0.106
		5.6	-.225	31.36	0.086
		5.8	-.244	33.64	0.064
		6.0	-.256	36.00	0.051

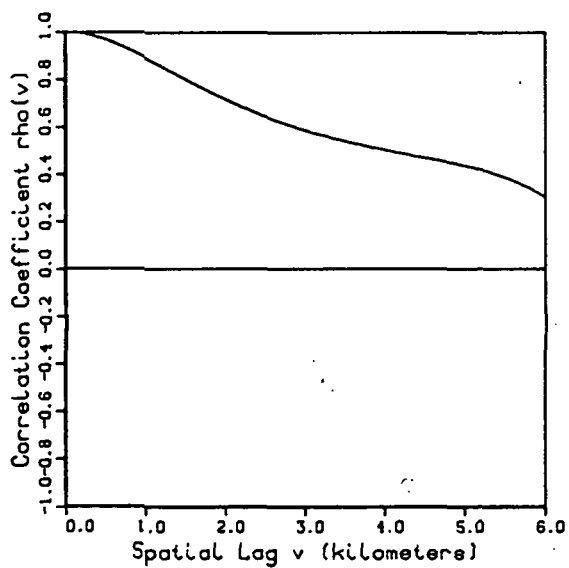
Walnut Gulch, Arizona

Ac=154.21 sq.km.

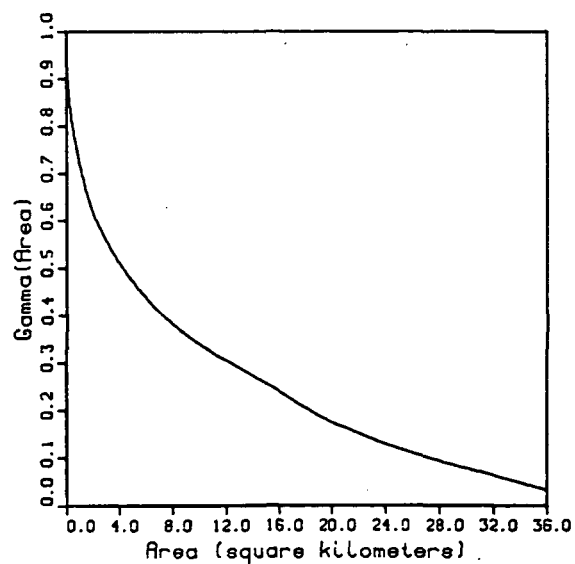
Storm Day
Sept 8 ,1976



Spatial Correlation



Variance Function



Storm Day Sept 8 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.162$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.838$

Expected Value of Point Depth (mm.): $E(Y) = 1.518$

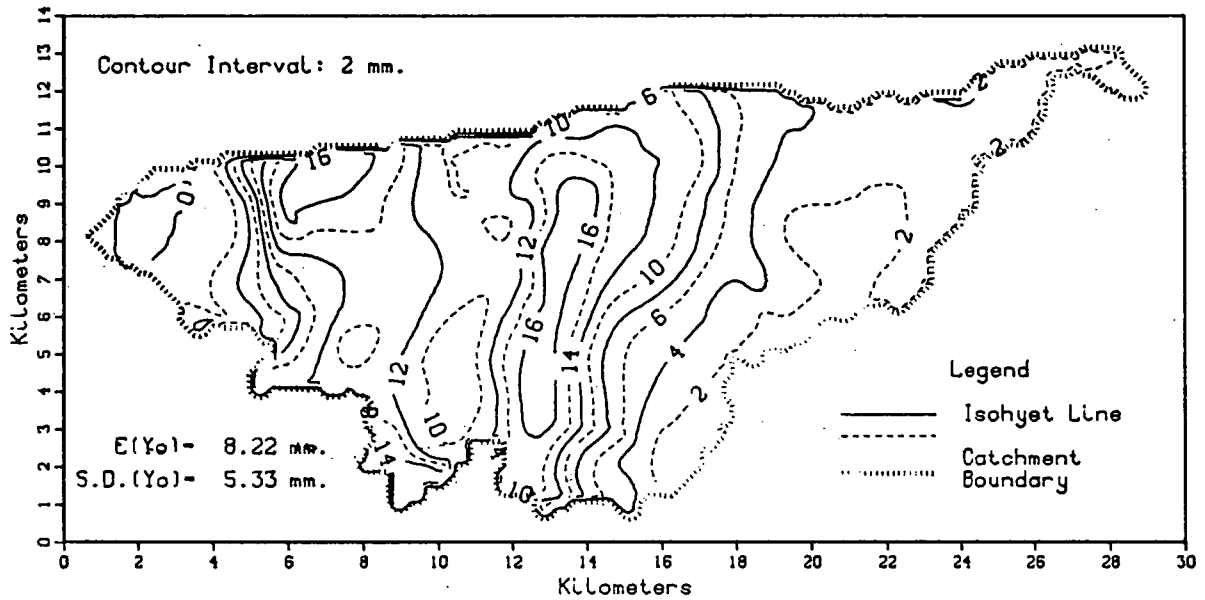
Variance of Point Depth (mm. sq.): $Var(Y) = 1.288$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.425$

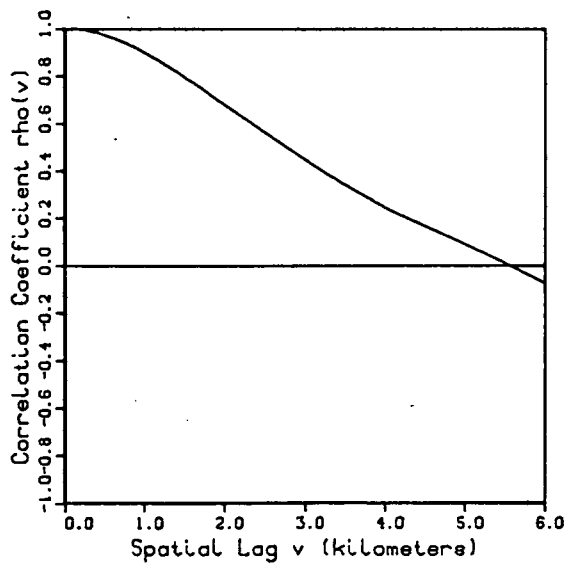
Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	0.669	0.0	1.000	0.00	1.000
2	0.323	0.2	0.994	0.04	0.942
3	0.086	0.4	0.977	0.16	0.880
4	0.029	0.6	0.953	0.36	0.823
5	0.001	0.8	0.922	0.64	0.772
6	0.000	1.0	0.887	1.00	0.720
		1.2	0.850	1.44	0.666
		1.4	0.814	1.96	0.618
		1.6	0.779	2.56	0.579
		1.8	0.745	3.24	0.543
		2.0	0.712	4.00	0.508
		2.2	0.683	4.84	0.474
		2.4	0.655	5.76	0.441
		2.6	0.629	6.76	0.410
		2.8	0.605	7.84	0.381
		3.0	0.583	9.00	0.356
		3.2	0.564	10.24	0.333
		3.4	0.546	11.56	0.311
		3.6	0.530	12.96	0.288
		3.8	0.515	14.44	0.265
		4.0	0.501	16.00	0.238
		4.2	0.487	17.64	0.208
		4.4	0.473	19.36	0.182
		4.6	0.461	21.16	0.160
		4.8	0.448	23.04	0.138
		5.0	0.434	25.00	0.118
		5.2	0.418	27.04	0.100
		5.4	0.397	29.16	0.083
		5.6	0.371	31.36	0.067
		5.8	0.339	33.64	0.050
		6.0	0.302	36.00	0.031

Walnut Gulch, Arizona
 $A_c = 154.21$ sq.km.

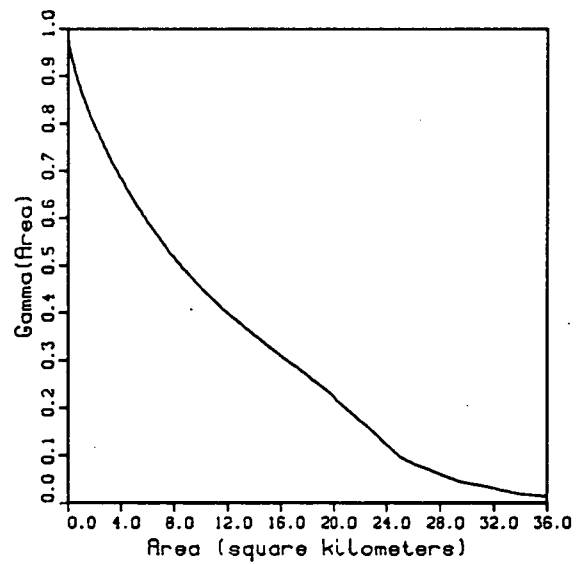
Storm Day
 Sept 10, 1976



Spatial Correlation



Variance Function



Storm Day Sept 10 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.015$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.985$

Expected Value of Point Depth (mm.): $E(Y) = 8.179$

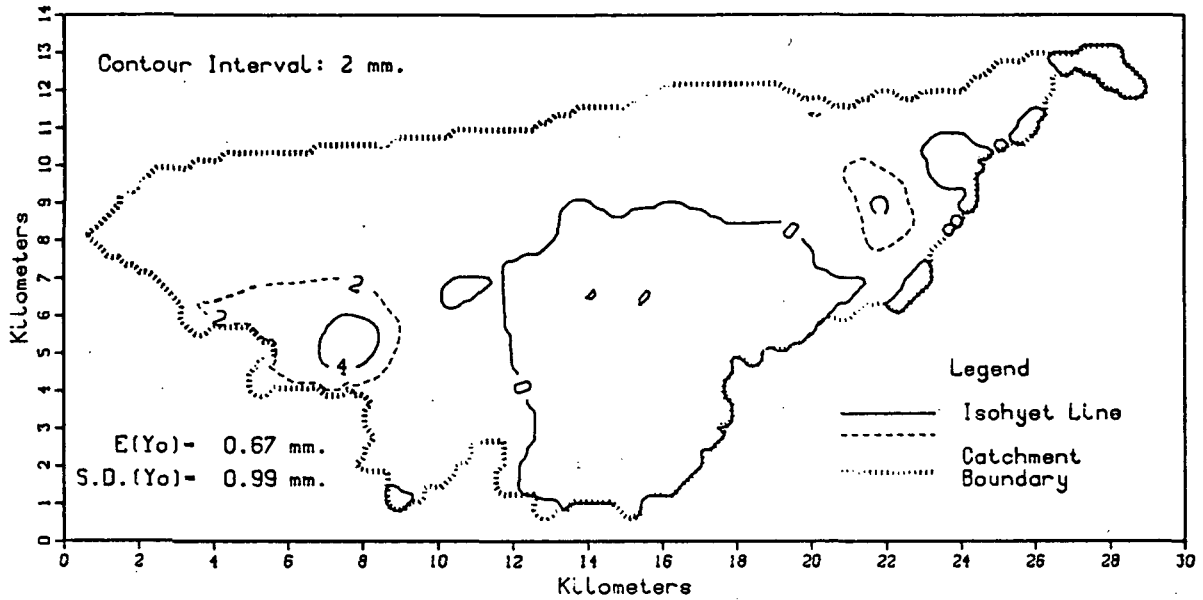
Variance of Point Depth (mm. sq.): $Var(Y) = 26.529$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.029$

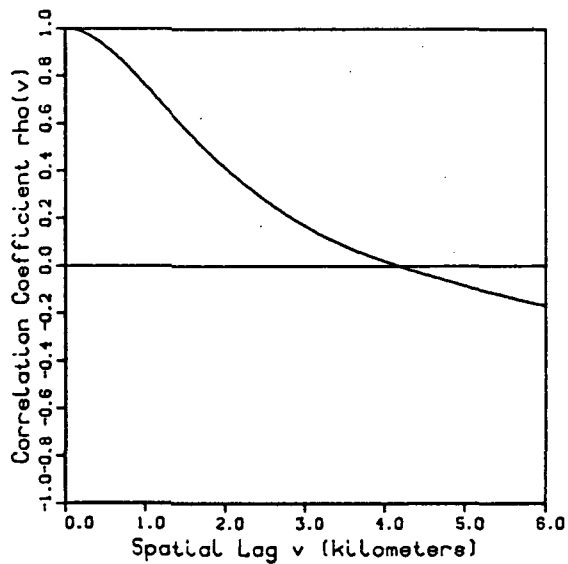
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.951	0.0	1.000	0.00	1.000
2	0.870	0.2	0.995	0.04	0.981
3	0.763	0.4	0.981	0.16	0.957
4	0.672	0.6	0.959	0.36	0.929
5	0.621	0.8	0.930	0.64	0.899
6	0.589	1.0	0.896	1.00	0.867
7	0.564	1.2	0.856	1.44	0.833
8	0.542	1.4	0.813	1.96	0.797
9	0.509	1.6	0.768	2.56	0.759
10	0.458	1.8	0.722	3.24	0.719
11	0.370	2.0	0.675	4.00	0.680
12	0.288	2.2	0.628	4.84	0.639
13	0.210	2.4	0.581	5.76	0.598
14	0.147	2.6	0.535	6.76	0.557
15	0.103	2.8	0.488	7.84	0.517
16	0.062	3.0	0.442	9.00	0.479
17	0.014	3.2	0.398	10.24	0.443
18	0.000	3.4	0.356	11.56	0.407
		3.6	0.316	12.96	0.373
		3.8	0.278	14.44	0.340
		4.0	0.242	16.00	0.307
		4.2	0.208	17.64	0.272
		4.4	0.177	19.36	0.235
		4.6	0.147	21.16	0.192
		4.8	0.117	23.04	0.146
		5.0	0.087	25.00	0.096
		5.2	0.055	27.04	0.070
		5.4	0.022	29.16	0.046
		5.6	-0.010	31.36	0.033
		5.8	-0.044	33.64	0.019
		6.0	-0.079	36.00	0.013

Walnut Gulch, Arizona
Ac=154.21 sq.km.

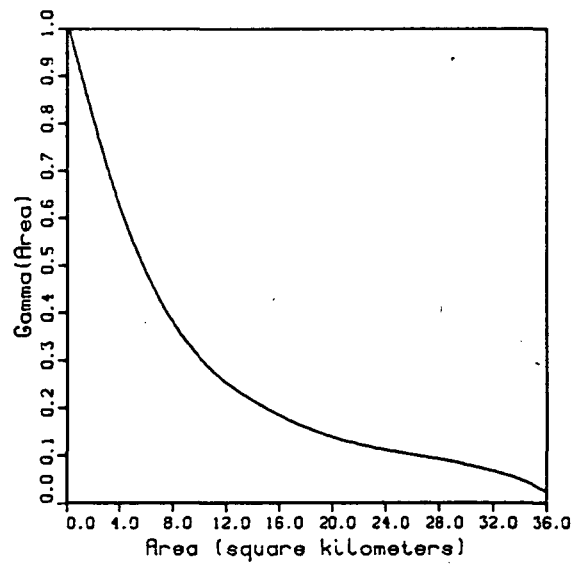
Storm Day
Sept 23, 1976



Spatial Correlation



Variance Function



Storm Day Sept 23 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.305$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.695$

Expected Value of Point Depth (mm.): $E(Y) = 0.615$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.817$

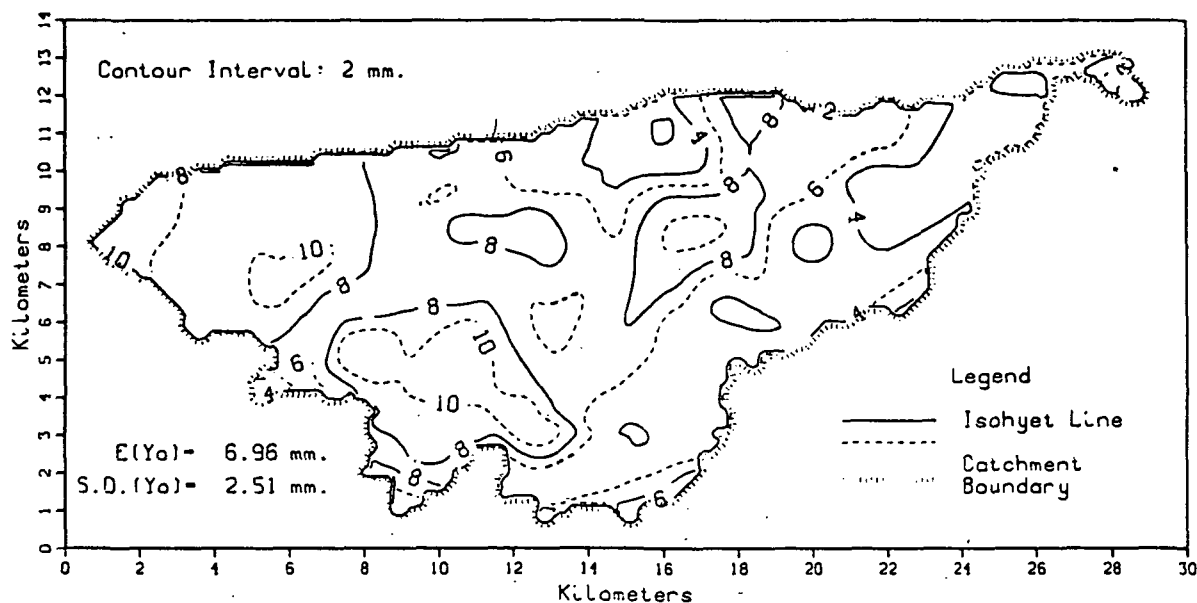
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.457$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.176	0.0	1.000	0.00	1.000
2	0.079	0.2	0.985	0.04	1.006
3	0.043	0.4	0.947	0.16	1.000
4	0.012	0.6	0.893	0.36	0.980
5	0.004	0.8	0.828	0.64	0.950
6	0.000	1.0	0.756	1.00	0.911
		1.2	0.682	1.44	0.866
		1.4	0.608	1.96	0.812
		1.6	0.537	2.56	0.751
		1.8	0.471	3.24	0.686
		2.0	0.409	4.00	0.621
		2.2	0.353	4.84	0.557
		2.4	0.300	5.76	0.496
		2.6	0.251	6.76	0.438
		2.8	0.206	7.84	0.385
		3.0	0.165	9.00	0.337
		3.2	0.128	10.24	0.296
		3.4	0.096	11.56	0.261
		3.6	0.067	12.96	0.231
		3.8	0.041	14.44	0.206
		4.0	0.017	16.00	0.182
		4.2	-.006	17.64	0.160
		4.4	-.028	19.36	0.142
		4.6	-.048	21.16	0.128
		4.8	-.068	23.04	0.115
		5.0	-.088	25.00	0.105
		5.2	-.107	27.04	0.096
		5.4	-.125	29.16	0.085
		5.6	-.142	31.36	0.071
		5.8	-.159	33.64	0.052
		6.0	-.175	36.00	0.022

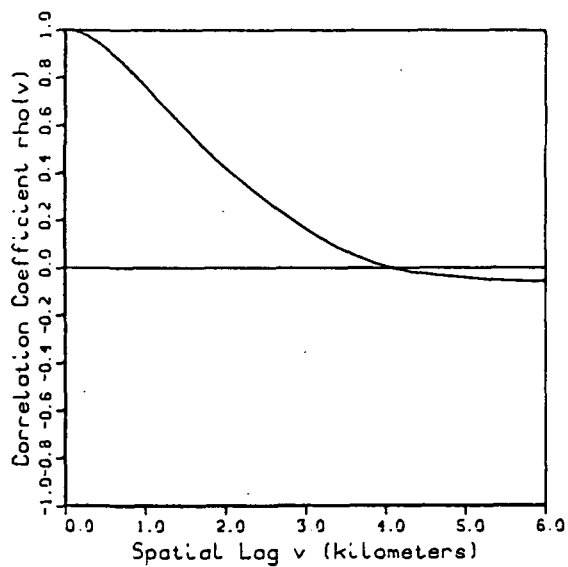
Walnut Gulch, Arizona

Ac=154.21 sq.km.

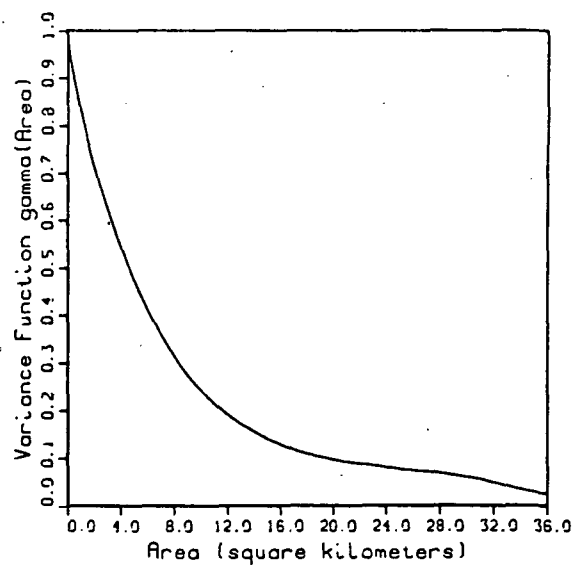
Storm Day
Sept 24, 1976



Spatial Correlation



Variance Function



Storm Day Sept 24 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 6.990$

Variance of Point Depth (mm. sq.): $Var(Y) = 5.008$

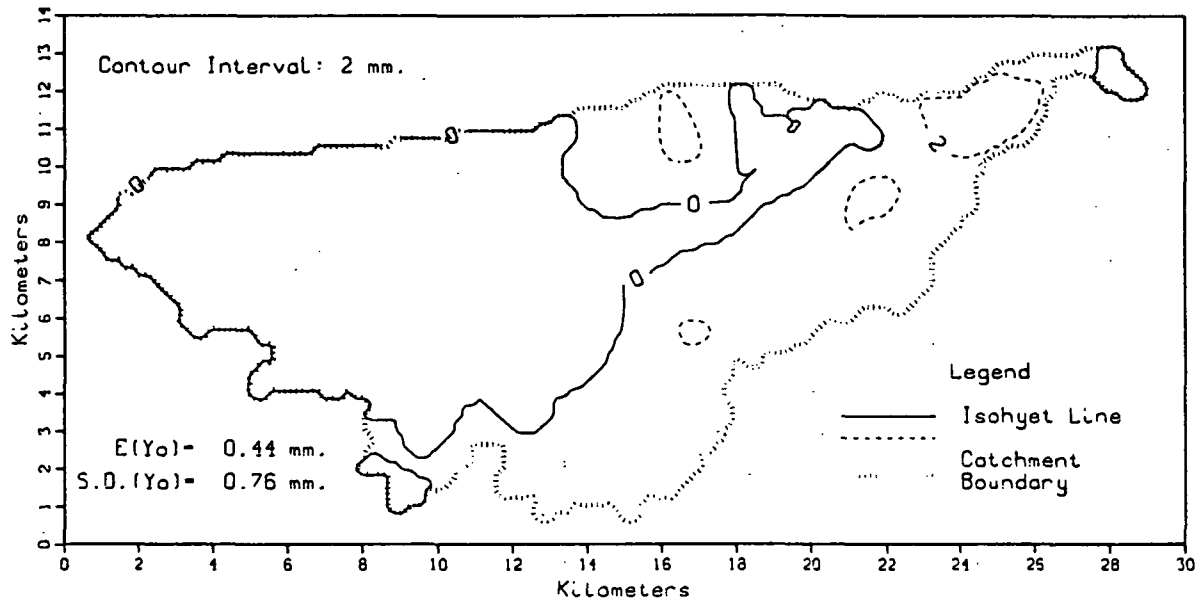
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.033$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.986	0.04	0.974
3	0.995	0.4	0.949	0.16	0.949
4	0.894	0.6	0.896	0.36	0.919
5	0.734	0.8	0.832	0.64	0.880
6	0.648	1.0	0.762	1.00	0.832
7	0.517	1.2	0.690	1.44	0.778
8	0.351	1.4	0.618	1.96	0.721
9	0.240	1.6	0.548	2.56	0.664
10	0.094	1.8	0.482	3.24	0.604
11	0.024	2.0	0.419	4.00	0.545
12	0.000	2.2	0.362	4.84	0.485
13	0.000	2.4	0.308	5.76	0.426
		2.6	0.256	6.76	0.371
		2.8	0.208	7.84	0.319
		3.0	0.162	9.00	0.274
		3.2	0.121	10.24	0.235
		3.4	0.083	11.56	0.201
		3.6	0.052	12.96	0.172
		3.8	0.025	14.44	0.148
		4.0	0.004	16.00	0.128
		4.2	-.012	17.64	0.111
		4.4	-.024	19.36	0.099
		4.6	-.033	21.16	0.091
		4.8	-.040	23.04	0.083
		5.0	-.046	25.00	0.076
		5.2	-.051	27.04	0.070
		5.4	-.056	29.16	0.062
		5.6	-.059	31.36	0.052
		5.8	-.060	33.64	0.036
		6.0	-.058	36.00	0.024

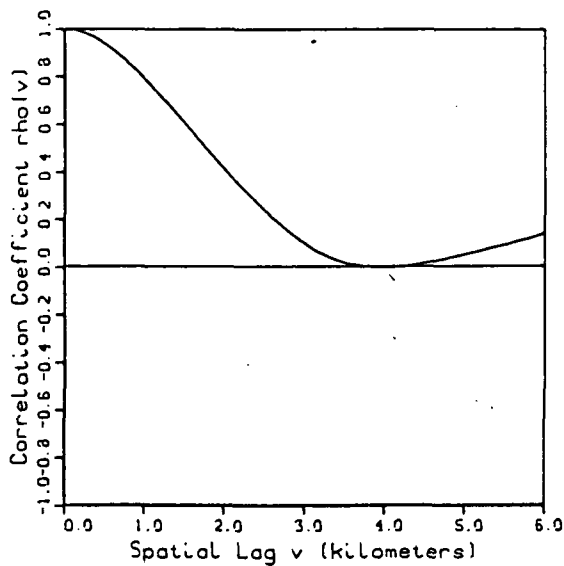
Walnut Gulch, Arizona

Ac=154.21 sq.km.

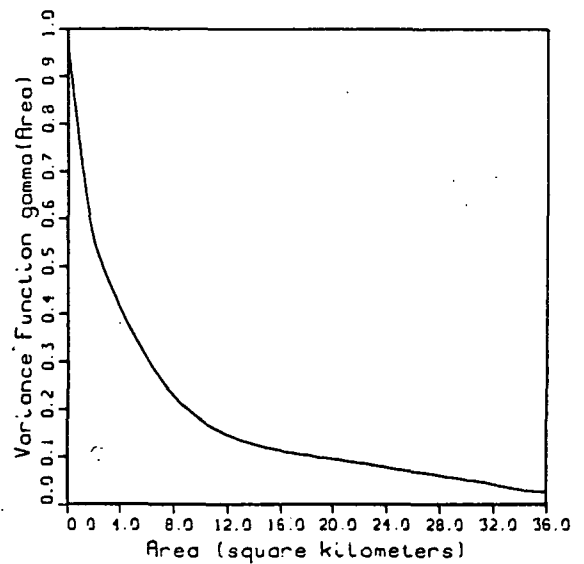
Storm Day
Sept 25, 1976



Spatial Correlation



Variance Function



Storm Day Sept 25 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.534$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.466$

Expected Value of Point Depth (mm.): $E(Y) = 0.465$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.530$

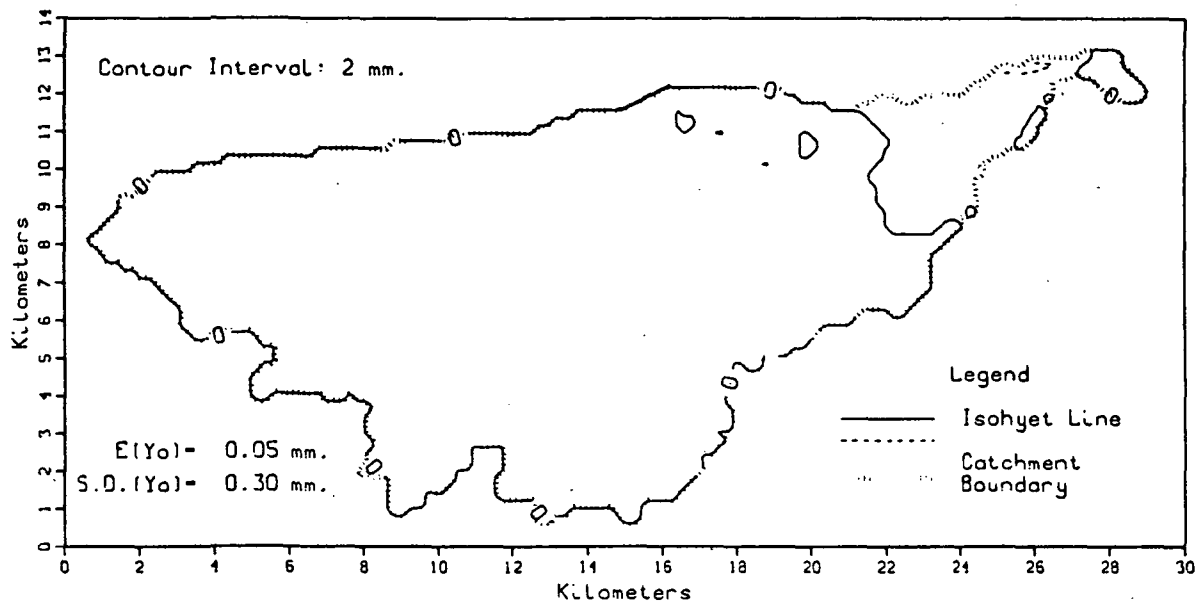
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.677$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.211	0.0	1.000	0.00	1.000
2	0.050	0.2	0.989	0.04	0.978
3	0.008	0.4	0.958	0.16	0.942
4	0.000	0.6	0.913	0.36	0.887
		0.8	0.856	0.64	0.816
		1.0	0.791	1.00	0.734
		1.2	0.719	1.44	0.642
		1.4	0.644	1.96	0.560
		1.6	0.566	2.56	0.506
		1.8	0.489	3.24	0.458
		2.0	0.412	4.00	0.409
		2.2	0.341	4.84	0.361
		2.4	0.273	5.76	0.314
		2.6	0.209	6.76	0.270
		2.8	0.151	7.84	0.231
		3.0	0.100	9.00	0.199
		3.2	0.058	10.24	0.172
		3.4	0.027	11.56	0.151
		3.6	0.009	12.96	0.134
		3.8	-0.001	14.44	0.122
		4.0	-0.003	16.00	0.112
		4.2	0.002	17.64	0.104
		4.4	0.011	19.36	0.097
		4.6	0.024	21.16	0.089
		4.8	0.038	23.04	0.082
		5.0	0.053	25.00	0.071
		5.2	0.069	27.04	0.064
		5.4	0.086	29.16	0.054
		5.6	0.103	31.36	0.045
		5.8	0.122	33.64	0.031
		6.0	0.142	36.00	0.025

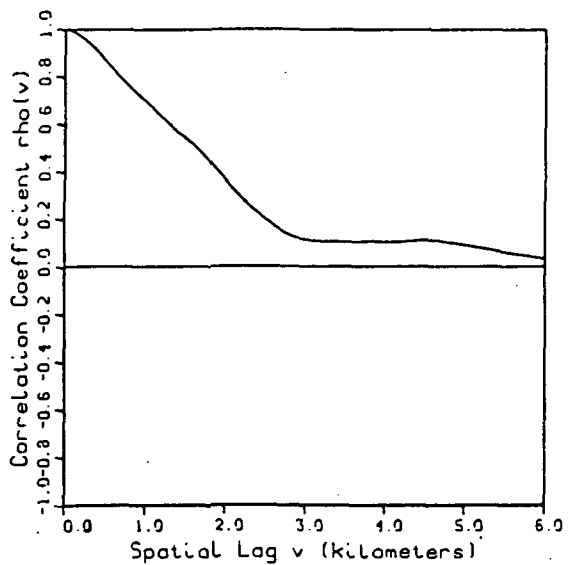
Walnut Gulch, Arizona
Ac=154.21 sq.km.

Ac-154.21 sq.km.

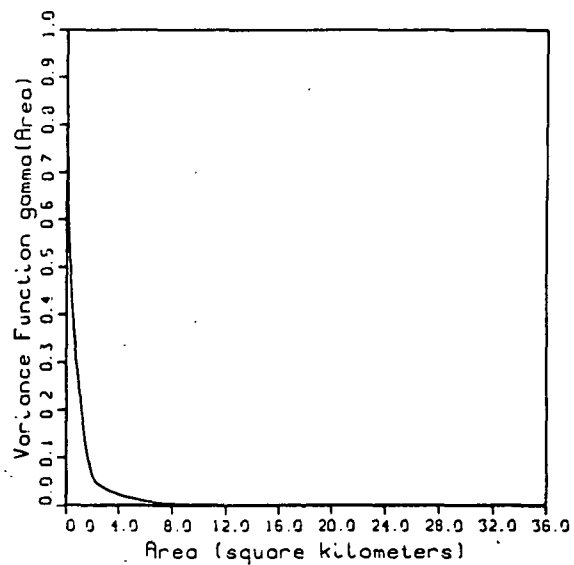
Storm Day
Sept 26, 1976



Spatial Correlation



Variance Function



Storm Day Sept 26 1976

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.913$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.087$

Expected Value of Point Depth (mm.): $E(Y) = 0.046$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.049$

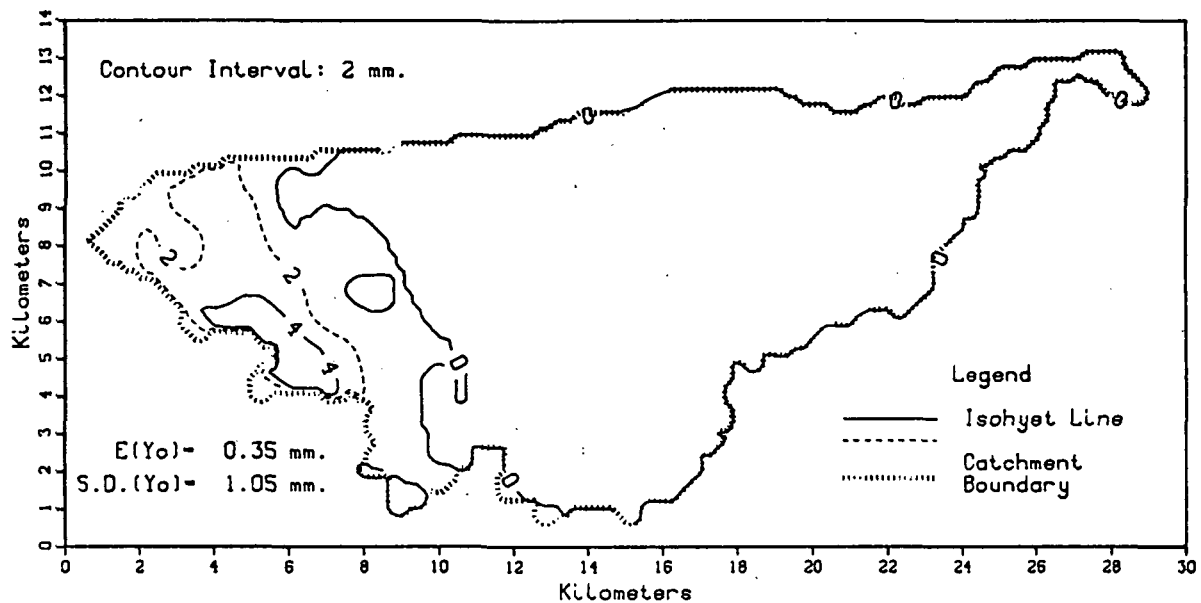
Coef. of Skewness of Point Depth: $S.C.(Y) = 6.002$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.016	0.0	1.000	0.00	1.000
2	0.001	0.2	0.969	0.04	0.790
3	0.000	0.4	0.909	0.16	0.599
		0.6	0.832	0.36	0.457
		0.8	0.758	0.64	0.341
		1.0	0.696	1.00	0.238
		1.2	0.630	1.44	0.133
		1.4	0.567	1.96	0.062
		1.6	0.513	2.56	0.040
		1.8	0.443	3.24	0.030
		2.0	0.365	4.00	0.022
		2.2	0.288	4.84	0.015
		2.4	0.228	5.76	0.010
		2.6	0.174	6.76	0.005
		2.8	0.133	7.84	0.002
		3.0	0.113	9.00	0.001
		3.2	0.106	10.24	0.001
		3.4	0.105	11.56	0.000
		3.6	0.105	12.96	0.000
		3.8	0.107	14.44	0.000
		4.0	0.104	16.00	0.000
		4.2	0.107	17.64	0.000
		4.4	0.112	19.36	0.000
		4.6	0.110	21.16	0.000
		4.8	0.101	23.04	0.000
		5.0	0.090	25.00	0.000
		5.2	0.078	27.04	0.000
		5.4	0.066	29.16	0.000
		5.6	0.054	31.36	0.000
		5.8	0.044	33.64	0.000
		6.0	0.033	36.00	0.000

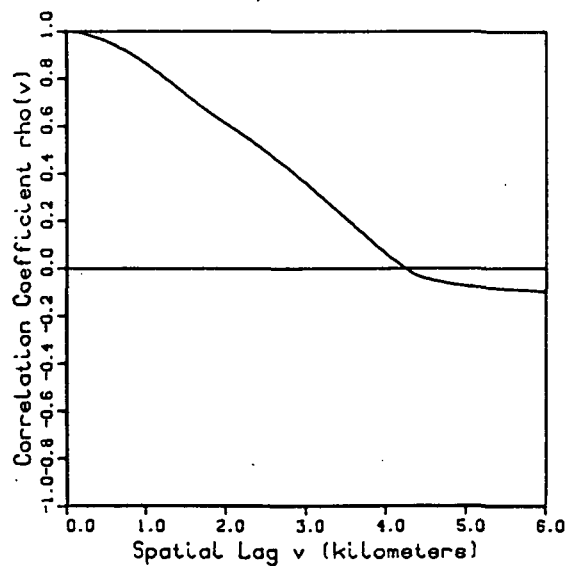
Walnut Gulch, Arizona

Ac=154.21 sq.km.

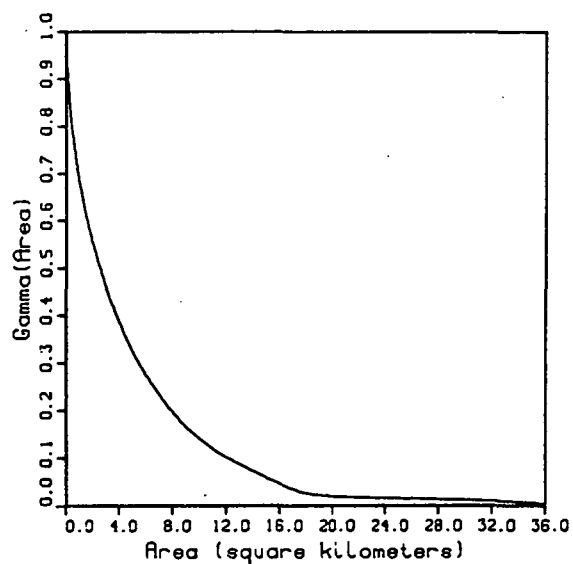
Storm Day
June 3, 1977



Spatial Correlation



Variance Function



Storm Day June 3 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.764$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.236$

Expected Value of Point Depth (mm.): $E(Y) = 0.406$

Variance of Point Depth (mm. sq.): $Var(Y) = 1.105$

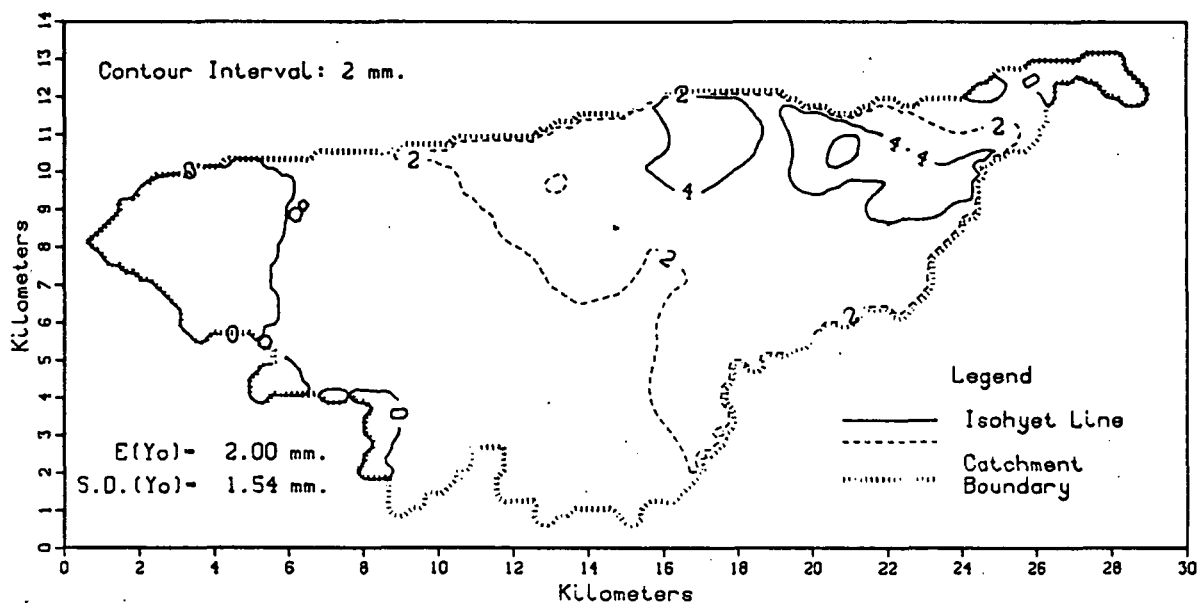
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.890$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.132	0.0	1.000	0.00	1.000
2	0.092	0.2	0.990	0.04	0.958
3	0.054	0.4	0.969	0.16	0.898
4	0.021	0.6	0.939	0.36	0.825
5	0.010	0.8	0.902	0.64	0.755
6	0.000	1.0	0.858	1.00	0.686
		1.2	0.808	1.44	0.620
		1.4	0.756	1.96	0.557
		1.6	0.703	2.56	0.497
		1.8	0.654	3.24	0.439
		2.0	0.608	4.00	0.385
		2.2	0.562	4.84	0.333
		2.4	0.514	5.76	0.285
		2.6	0.463	6.76	0.240
		2.8	0.411	7.84	0.199
		3.0	0.355	9.00	0.163
		3.2	0.297	10.24	0.133
		3.4	0.236	11.56	0.107
		3.6	0.176	12.96	0.086
		3.8	0.116	14.44	0.065
		4.0	0.058	16.00	0.045
		4.2	0.006	17.64	0.027
		4.4	-0.036	19.36	0.020
		4.6	-0.054	21.16	0.018
		4.8	-0.068	23.04	0.016
		5.0	-0.077	25.00	0.015
		5.2	-0.084	27.04	0.014
		5.4	-0.090	29.16	0.012
		5.6	-0.094	31.36	0.010
		5.8	-0.098	33.64	0.007
		6.0	-0.102	36.00	0.001

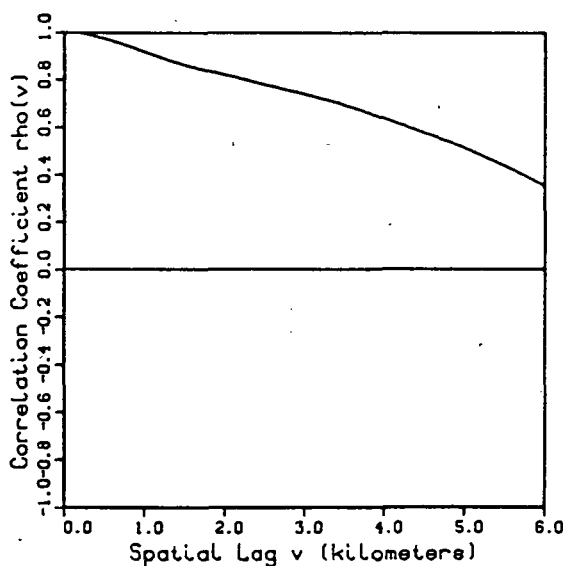
Walnut Gulch, Arizona

Ac=154.21 sq.km.

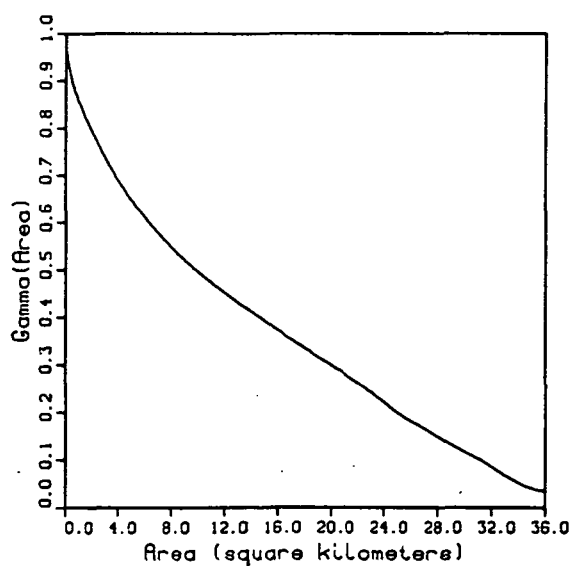
Storm Day
June 4, 1977



Spatial Correlation



Variance Function



Storm Day June 4 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.112$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.888$

Expected Value of Point Depth (mm.): $E(Y) = 1.874$

Variance of Point Depth (mm. sq.): $Var(Y) = 2.089$

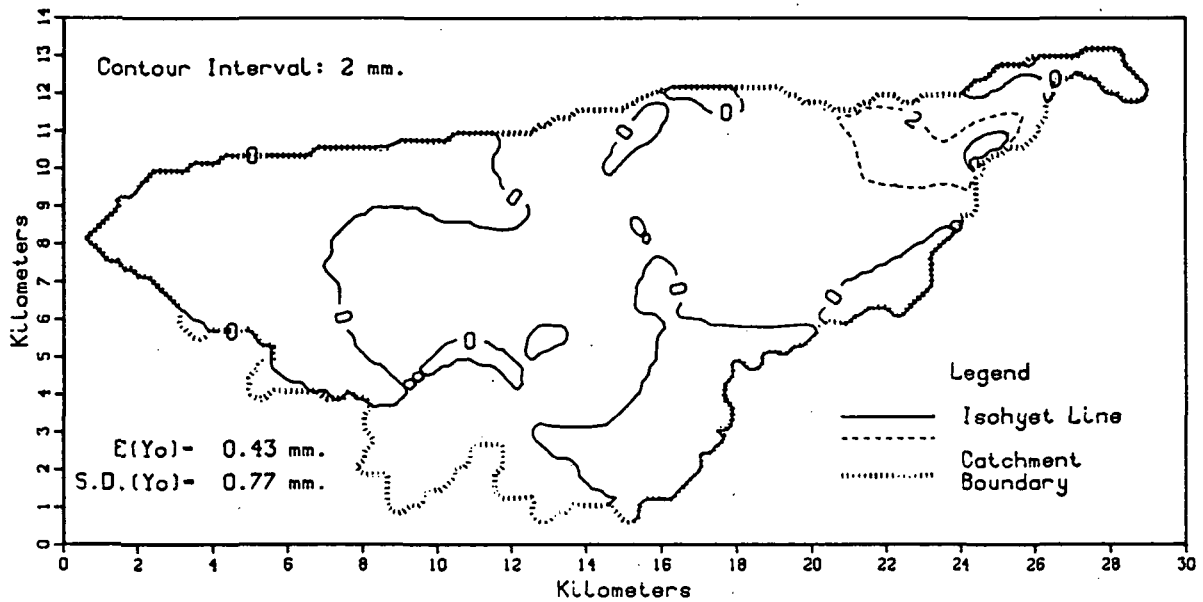
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.328$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.669	0.0	1.000	0.00	1.000
2	0.445	0.2	0.995	0.04	0.975
3	0.276	0.4	0.981	0.16	0.946
4	0.088	0.6	0.962	0.36	0.915
5	0.010	0.8	0.939	0.64	0.886
6	0.000	1.0	0.914	1.00	0.856
		1.2	0.890	1.44	0.826
		1.4	0.869	1.96	0.794
		1.6	0.850	2.56	0.759
		1.8	0.833	3.24	0.723
		2.0	0.819	4.00	0.687
		2.2	0.801	4.84	0.652
		2.4	0.785	5.76	0.617
		2.6	0.768	6.76	0.583
		2.8	0.753	7.84	0.550
		3.0	0.737	9.00	0.519
		3.2	0.720	10.24	0.489
		3.4	0.701	11.56	0.460
		3.6	0.680	12.96	0.432
		3.8	0.658	14.44	0.403
		4.0	0.634	16.00	0.372
		4.2	0.610	17.64	0.340
		4.4	0.586	19.36	0.309
		4.6	0.562	21.16	0.277
		4.8	0.537	23.04	0.240
		5.0	0.510	25.00	0.197
		5.2	0.481	27.04	0.164
		5.4	0.451	29.16	0.127
		5.6	0.418	31.36	0.096
		5.8	0.385	33.64	0.056
		6.0	0.349	36.00	0.035

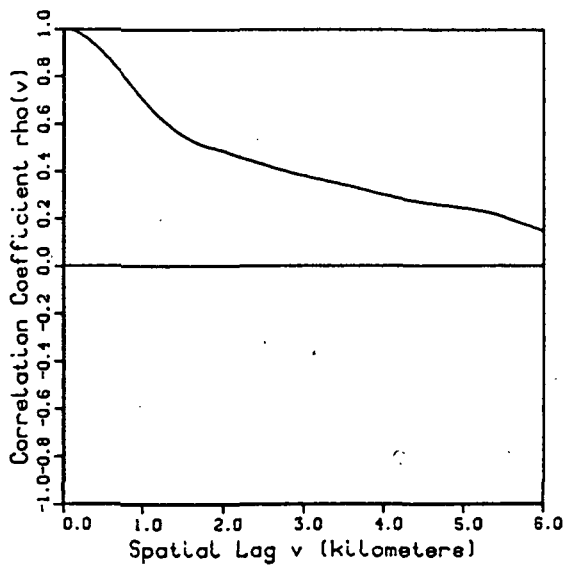
Walnut Gulch, Arizona

Ac=154.21 sq.km.

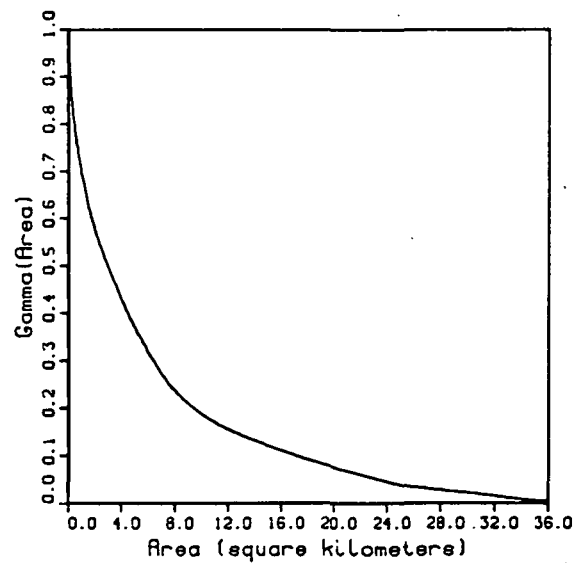
Storm Day
June 7, 1977



Spatial Correlation



Variance Function



Storm Day June 7 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.335$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.665$

Expected Value of Point Depth (mm.): $E(Y) = 0.436$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.444$

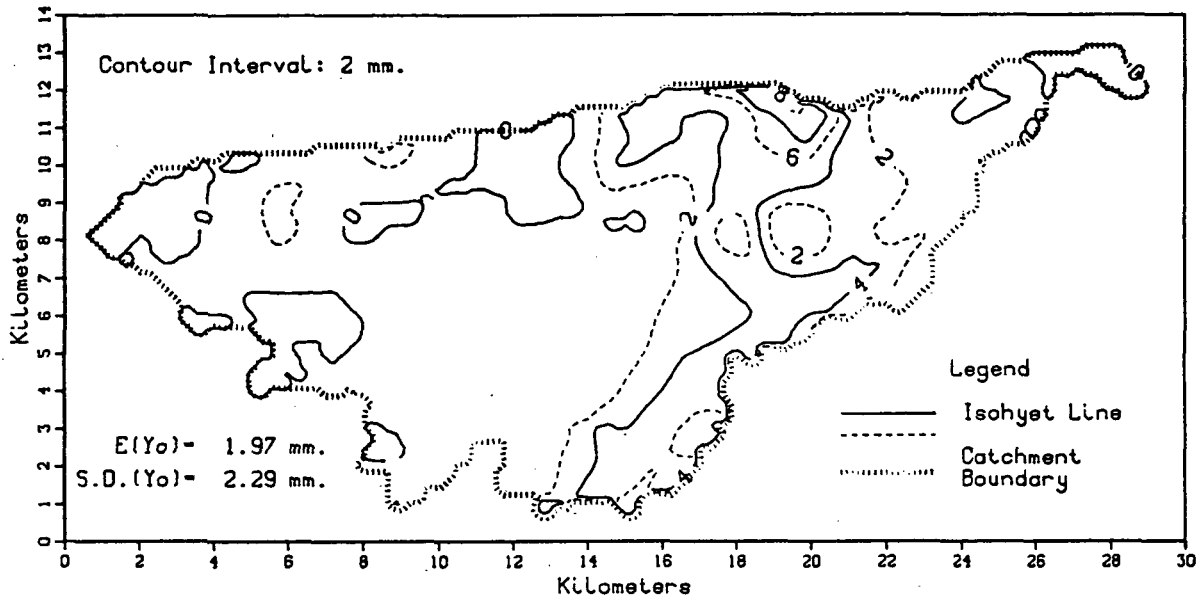
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.559$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho(v)		Variance Function A (km.sq.) Gamma (A)	
1	0.145	0.0	1.000	0.00	1.000
2	0.042	0.2	0.980	0.04	0.949
3	0.011	0.4	0.928	0.16	0.890
4	0.004	0.6	0.858	0.36	0.823
5	0.000	0.8	0.778	0.64	0.757
		1.0	0.698	1.00	0.695
		1.2	0.625	1.44	0.634
		1.4	0.568	1.96	0.576
		1.6	0.527	2.56	0.526
		1.8	0.501	3.24	0.477
		2.0	0.482	4.00	0.427
		2.2	0.457	4.84	0.376
		2.4	0.435	5.76	0.326
		2.6	0.414	6.76	0.279
		2.8	0.395	7.84	0.238
		3.0	0.378	9.00	0.207
		3.2	0.363	10.24	0.181
		3.4	0.348	11.56	0.160
		3.6	0.332	12.96	0.141
		3.8	0.315	14.44	0.125
		4.0	0.298	16.00	0.109
		4.2	0.283	17.64	0.094
		4.4	0.270	19.36	0.079
		4.6	0.260	21.16	0.065
		4.8	0.252	23.04	0.052
		5.0	0.243	25.00	0.038
		5.2	0.232	27.04	0.030
		5.4	0.215	29.16	0.023
		5.6	0.193	31.36	0.016
		5.8	0.170	33.64	0.008
		6.0	0.147	36.00	0.003

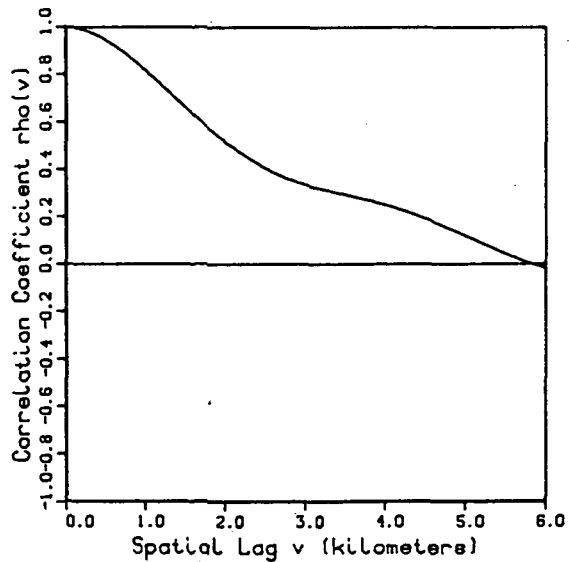
Walnut Gulch, Arizona

Ac=154.21 sq.km.

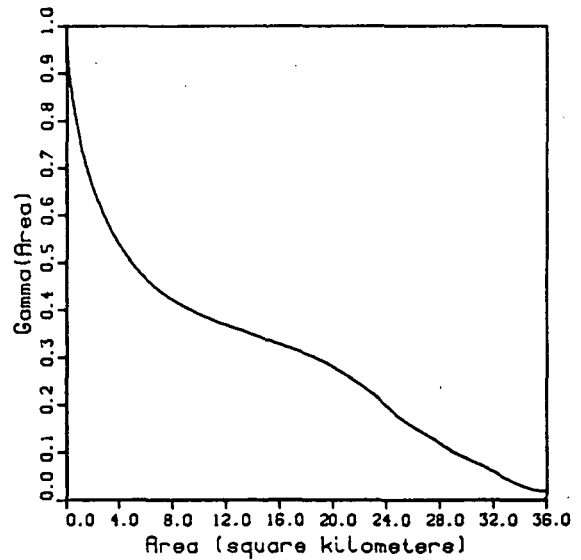
Storm Day
June 8, 1977



Spatial Correlation



Variance Function



Storm Day June 8 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.102$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.898$

Expected Value of Point Depth (mm.): $E(Y) = 1.809$

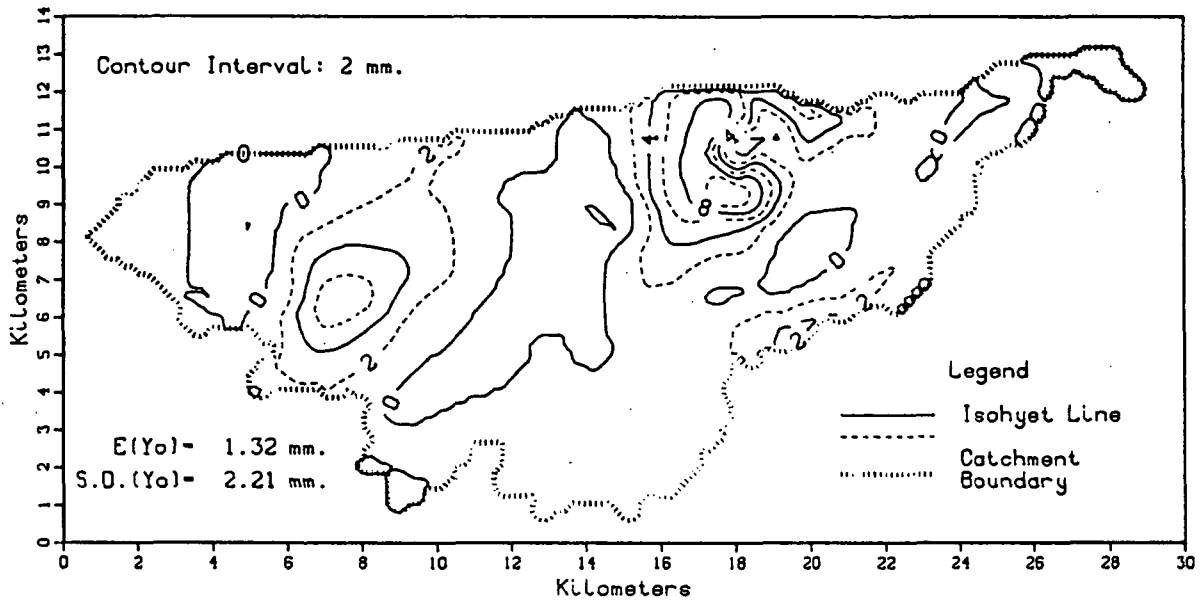
Variance of Point Depth (mm. sq.): $Var(Y) = 3.912$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.294$

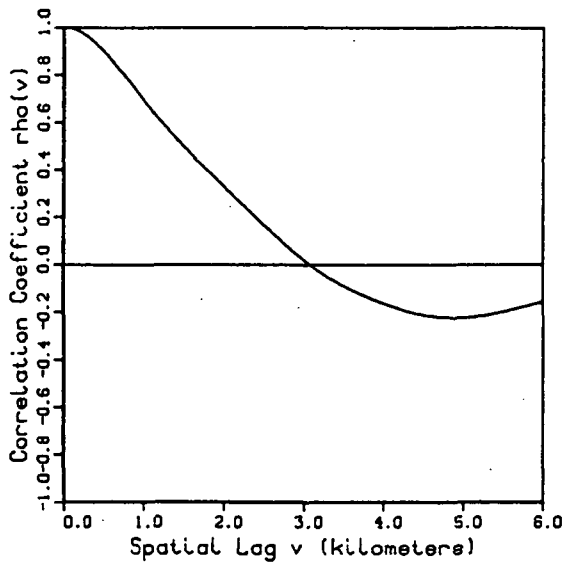
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.509	0.0	1.000	0.00	1.000
2	0.328	0.2	0.989	0.04	0.956
3	0.251	0.4	0.960	0.16	0.908
4	0.174	0.6	0.919	0.36	0.857
5	0.087	0.8	0.869	0.64	0.807
6	0.035	1.0	0.811	1.00	0.757
7	0.015	1.2	0.750	1.44	0.707
8	0.010	1.4	0.687	1.96	0.660
9	0.006	1.6	0.625	2.56	0.614
10	0.001	1.8	0.566	3.24	0.572
11	0.000	2.0	0.513	4.00	0.534
		2.2	0.465	4.84	0.499
		2.4	0.422	5.76	0.469
		2.6	0.385	6.76	0.443
		2.8	0.355	7.84	0.421
		3.0	0.332	9.00	0.402
		3.2	0.314	10.24	0.385
		3.4	0.298	11.56	0.371
		3.6	0.282	12.96	0.356
		3.8	0.266	14.44	0.341
		4.0	0.247	16.00	0.325
		4.2	0.226	17.64	0.308
		4.4	0.202	19.36	0.287
		4.6	0.174	21.16	0.258
		4.8	0.146	23.04	0.220
		5.0	0.115	25.00	0.170
		5.2	0.084	27.04	0.135
		5.4	0.054	29.16	0.096
		5.6	0.026	31.36	0.068
		5.8	0.002	33.64	0.033
		6.0	-0.019	36.00	0.018

Walnut Gulch, Arizona
Ac=154.21 sq.km.

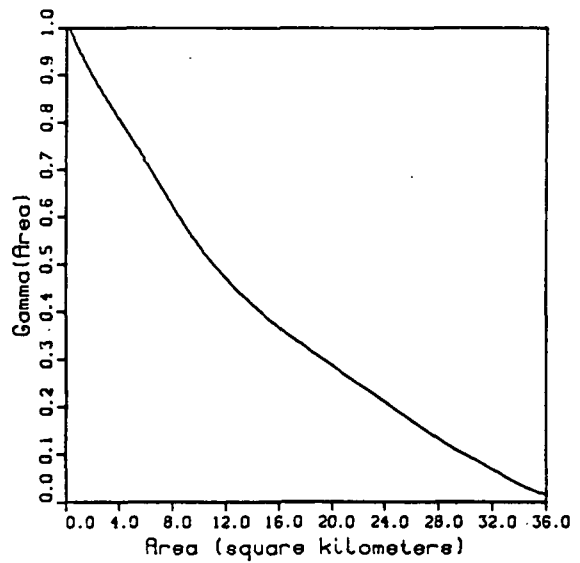
Storm Day
June 21, 1977



Spatial Correlation



Variance Function



Storm Day June 21 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.213$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.787$

Expected Value of Point Depth (mm.): $E(Y) = 1.383$

Variance of Point Depth (mm. sq.): $Var(Y) = 4.173$

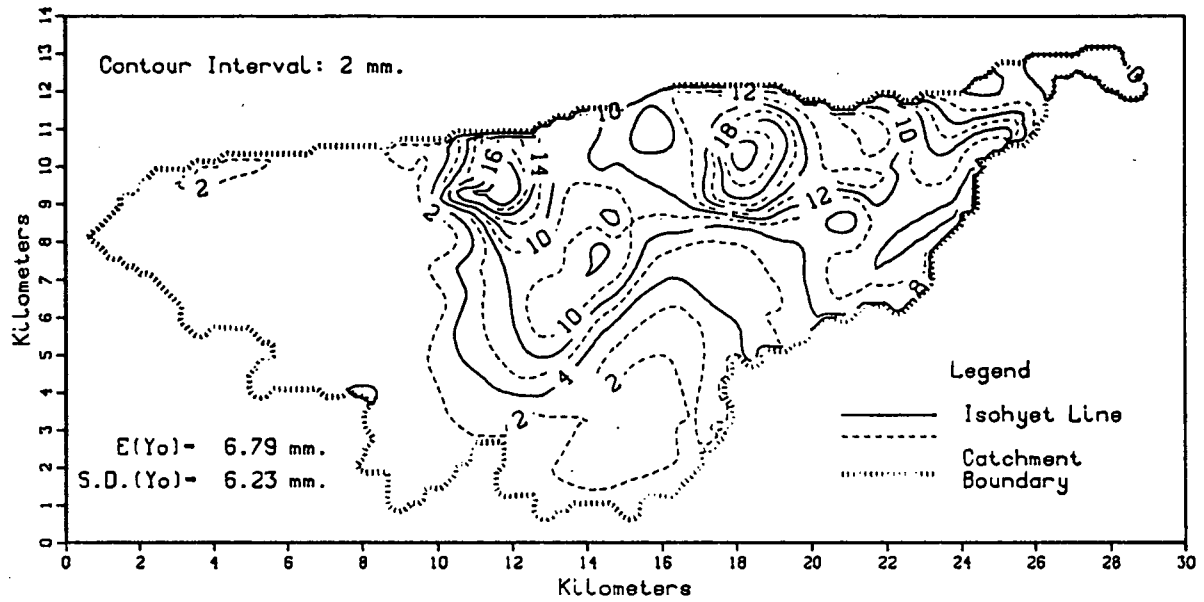
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.102$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.348	0.0	1.000	0.00	1.000
2	0.238	0.2	0.981	0.04	1.006
3	0.162	0.4	0.930	0.16	1.002
4	0.112	0.6	0.858	0.36	0.989
5	0.077	0.8	0.776	0.64	0.970
6	0.055	1.0	0.690	1.00	0.947
7	0.034	1.2	0.607	1.44	0.923
8	0.022	1.4	0.530	1.96	0.897
9	0.009	1.6	0.459	2.56	0.868
10	0.005	1.8	0.391	3.24	0.837
11	0.001	2.0	0.325	4.00	0.803
12	0.000	2.2	0.259	4.84	0.766
		2.4	0.194	5.76	0.724
		2.6	0.130	6.76	0.677
		2.8	0.070	7.84	0.627
		3.0	0.015	9.00	0.576
		3.2	-.035	10.24	0.526
		3.4	-.076	11.56	0.483
		3.6	-.110	12.96	0.441
		3.8	-.140	14.44	0.402
		4.0	-.167	16.00	0.365
		4.2	-.190	17.64	0.331
		4.4	-.209	19.36	0.297
		4.6	-.222	21.16	0.263
		4.8	-.228	23.04	0.228
		5.0	-.227	25.00	0.189
		5.2	-.220	27.04	0.149
		5.4	-.208	29.16	0.110
		5.6	-.191	31.36	0.078
		5.8	-.174	33.64	0.040
		6.0	-.159	36.00	0.015

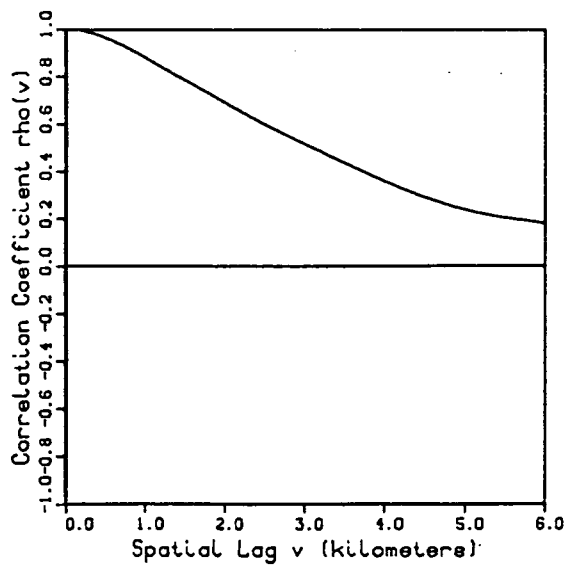
Walnut Gulch, Arizona

Ac=154.21 sq.km.

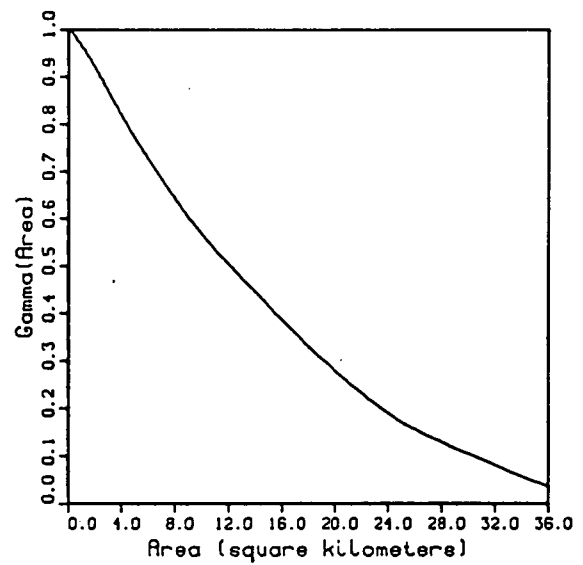
Storm Day
June 22, 1977



Spatial Correlation



Variance Function



Storm Day June 22 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.011$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.989$

Expected Value of Point Depth (mm.): $E(Y) = 5.952$

Variance of Point Depth (mm. sq.): $Var(Y) = 31.944$

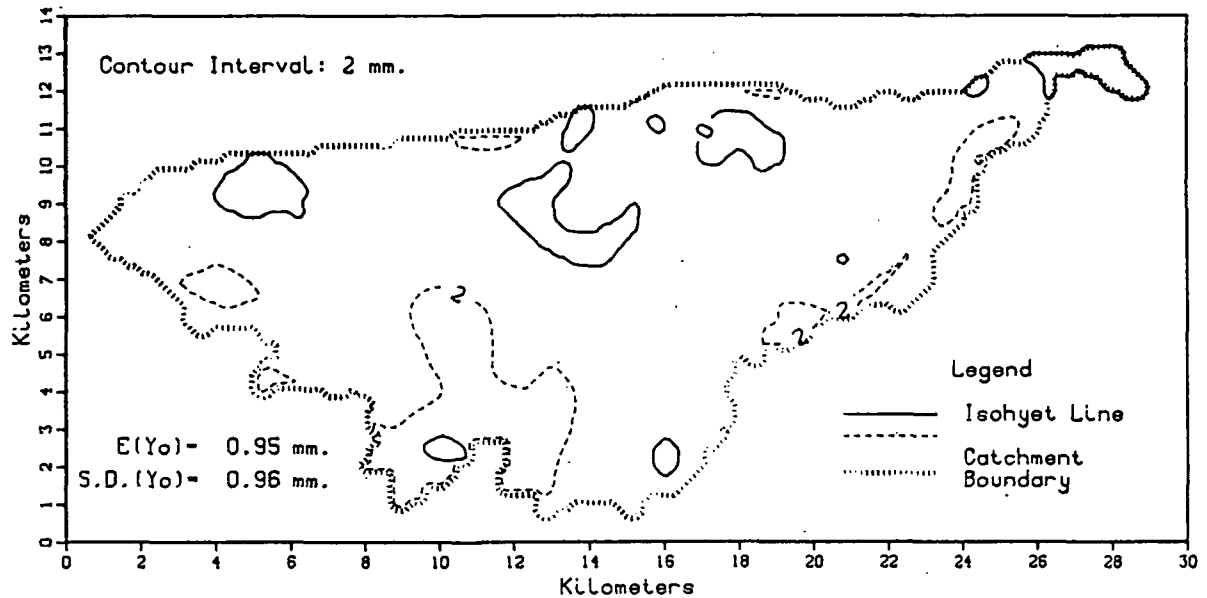
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.863$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.763	0.0	1.000	0.00	1.000
2	0.640	0.2	0.993	0.04	1.001
3	0.526	0.4	0.974	0.16	0.998
4	0.496	0.6	0.947	0.36	0.990
5	0.466	0.8	0.914	0.64	0.979
6	0.425	1.0	0.878	1.00	0.963
7	0.395	1.2	0.839	1.44	0.944
8	0.364	1.4	0.801	1.96	0.920
9	0.326	1.6	0.764	2.56	0.889
10	0.277	1.8	0.726	3.24	0.854
11	0.227	2.0	0.688	4.00	0.816
12	0.166	2.2	0.651	4.84	0.775
13	0.121	2.4	0.615	5.76	0.733
14	0.093	2.6	0.580	6.76	0.690
15	0.067	2.8	0.546	7.84	0.646
16	0.053	3.0	0.514	9.00	0.601
17	0.044	3.2	0.482	10.24	0.556
18	0.037	3.4	0.450	11.56	0.514
19	0.030	3.6	0.419	12.96	0.472
20	0.023	3.8	0.388	14.44	0.429
21	0.015	4.0	0.358	16.00	0.384
22	0.009	4.2	0.329	17.64	0.337
23	0.006	4.4	0.302	19.36	0.292
24	0.002	4.6	0.278	21.16	0.250
25	0.000	4.8	0.256	23.04	0.208
26	0.000	5.0	0.238	25.00	0.169
		5.2	0.222	27.04	0.140
		5.4	0.209	29.16	0.113
		5.6	0.199	31.36	0.088
		5.8	0.189	33.64	0.059
		6.0	0.180	36.00	0.036

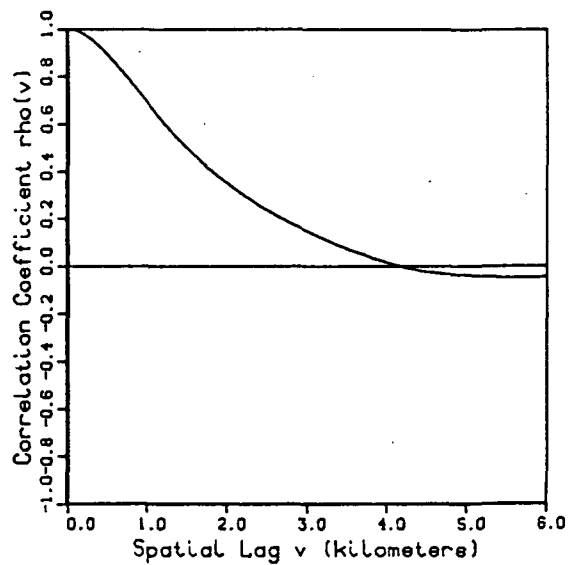
Walnut Gulch, Arizona

Ac=154.21 sq.km.

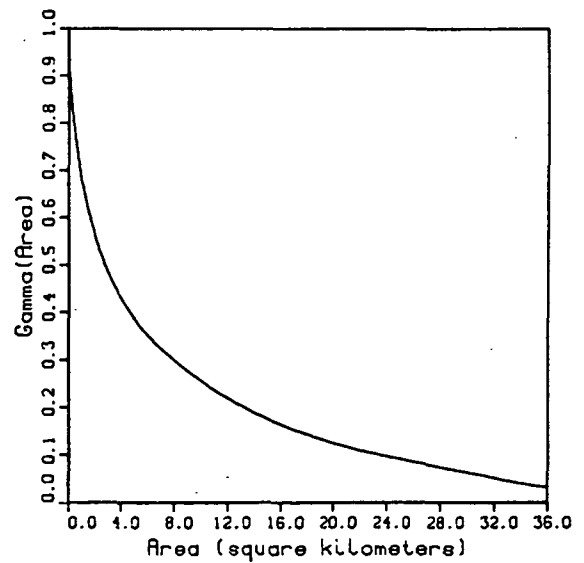
Storm Day
July 1, 1977



Spatial Correlation



Variance Function



Storm Day July 1 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.060$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.940$

Expected Value of Point Depth (mm.): $E(Y) = 1.012$

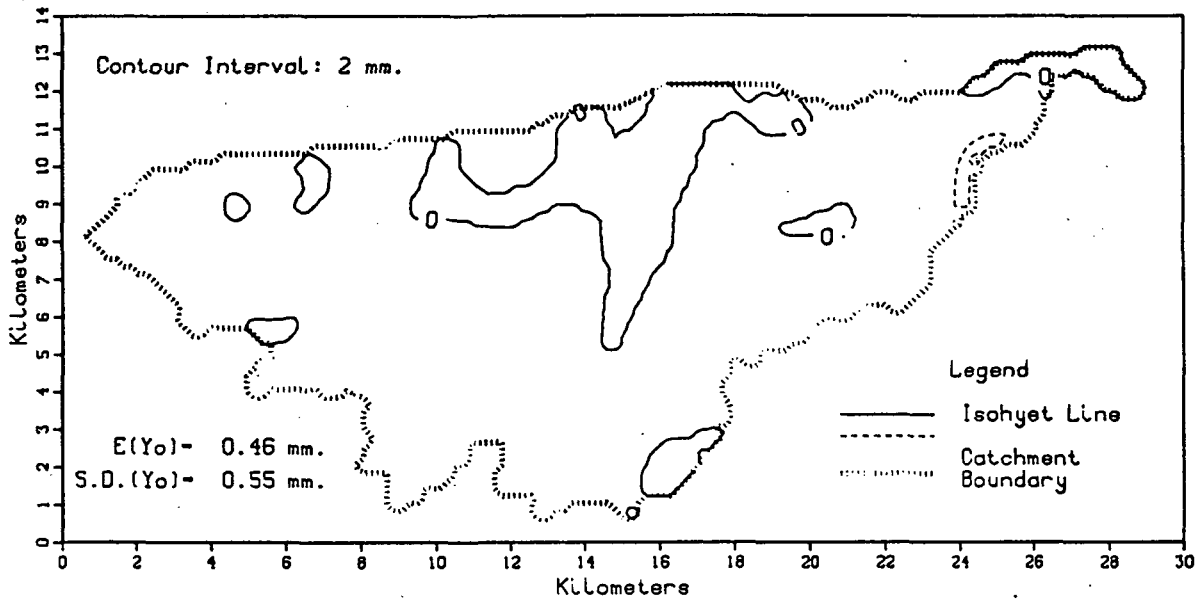
Variance of Point Depth (mm. sq.): $Var(Y) = 0.725$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.005$

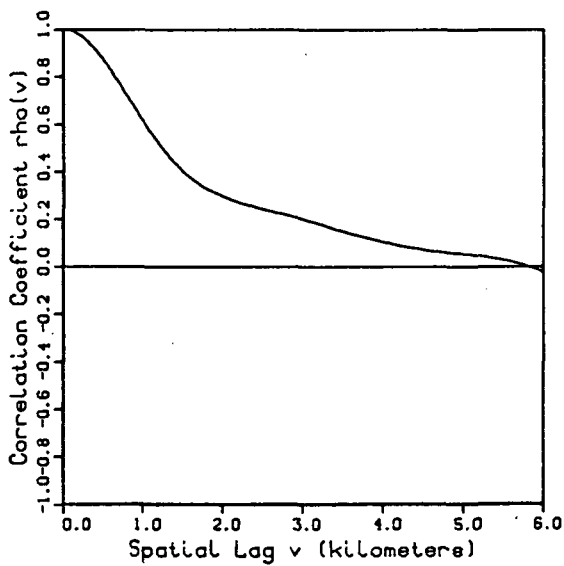
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.406	0.0	1.000	0.00	1.000
2	0.135	0.2	0.978	0.04	0.942
3	0.021	0.4	0.925	0.16	0.878
4	0.004	0.6	0.853	0.36	0.812
5	0.000	0.8	0.772	0.64	0.746
		1.0	0.685	1.00	0.684
		1.2	0.602	1.44	0.623
		1.4	0.525	1.96	0.564
		1.6	0.457	2.56	0.512
		1.8	0.398	3.24	0.467
		2.0	0.345	4.00	0.426
		2.2	0.295	4.84	0.390
		2.4	0.250	5.76	0.357
		2.6	0.210	6.76	0.328
		2.8	0.176	7.84	0.301
		3.0	0.143	9.00	0.274
		3.2	0.112	10.24	0.249
		3.4	0.083	11.56	0.225
		3.6	0.057	12.96	0.202
		3.8	0.033	14.44	0.182
		4.0	0.012	16.00	0.162
		4.2	-.007	17.64	0.145
		4.4	-.021	19.36	0.129
		4.6	-.031	21.16	0.115
		4.8	-.037	23.04	0.102
		5.0	-.041	25.00	0.090
		5.2	-.046	27.04	0.078
		5.4	-.051	29.16	0.067
		5.6	-.053	31.36	0.055
		5.8	-.052	33.64	0.041
		6.0	-.047	36.00	0.031

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

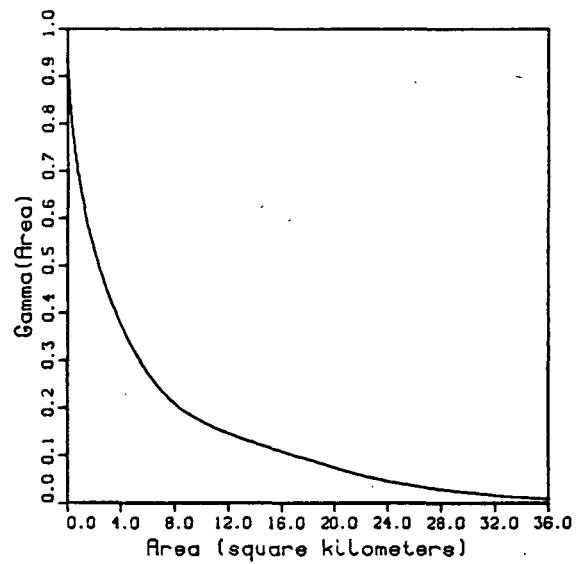
Storm Day
 July 2, 1977



Spatial Correlation



Variance Function



Storm Day July 2 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c) = 0.145$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c) = 0.855$

Expected Value of Point Depth (mm.): $E(Y) = 0.510$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.210$

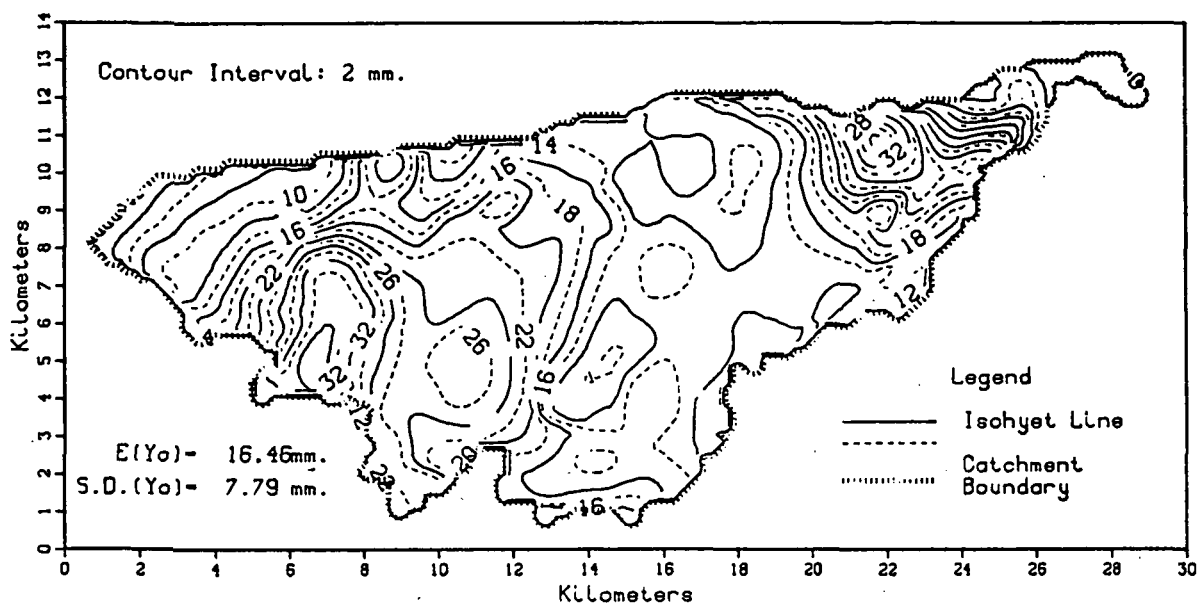
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.100$

Spatial Distribution of Total Storm Depth		Spatial Correlation		Variance Function	
y (mm.)	$A_{cw}/A_c (Y \geq y)$	v (km.)	$\rho(v)$	A (km.sq.)	Gamma (A)
1	0.130	0.0	1.000	0.00	1.000
2	0.006	0.2	0.975	0.04	0.929
3	0.000	0.4	0.910	0.16	0.857
		0.6	0.820	0.36	0.788
		0.8	0.715	0.64	0.720
		1.0	0.610	1.00	0.655
		1.2	0.513	1.44	0.593
		1.4	0.432	1.96	0.534
		1.6	0.370	2.56	0.477
		1.8	0.325	3.24	0.423
		2.0	0.294	4.00	0.372
		2.2	0.268	4.84	0.325
		2.4	0.249	5.76	0.282
		2.6	0.232	6.76	0.243
		2.8	0.216	7.84	0.210
		3.0	0.198	9.00	0.186
		3.2	0.179	10.24	0.167
		3.4	0.157	11.56	0.150
		3.6	0.137	12.96	0.134
		3.8	0.119	14.44	0.120
		4.0	0.103	16.00	0.106
		4.2	0.087	17.64	0.092
		4.4	0.074	19.36	0.078
		4.6	0.064	21.16	0.064
		4.8	0.057	23.04	0.050
		5.0	0.052	25.00	0.039
		5.2	0.043	27.04	0.031
		5.4	0.033	29.16	0.023
		5.6	0.019	31.36	0.017
		5.8	0.000	33.64	0.011
		6.0	-0.026	36.00	0.007

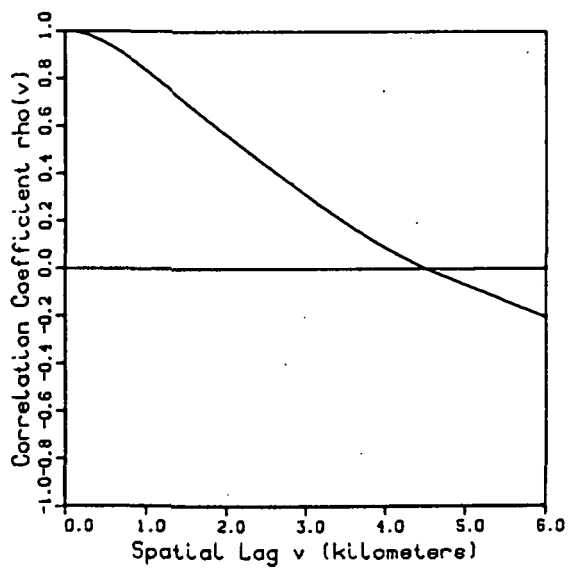
Walnut Gulch, Arizona

Ac=154.21 sq.km.

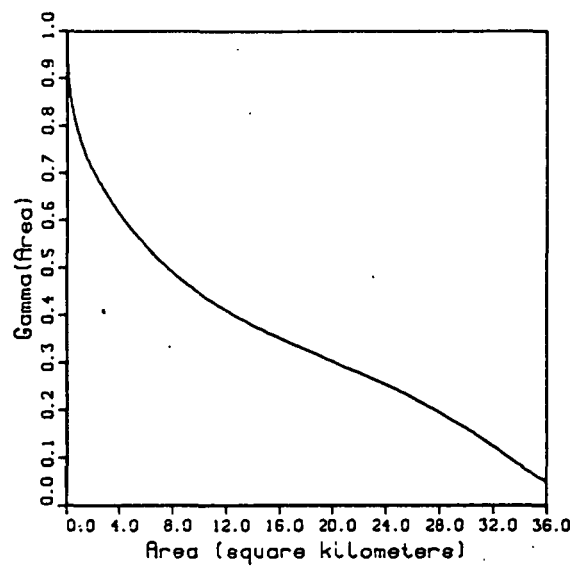
Storm Day
July 3, 1977



Spatial Correlation



Variance Function



Storm Day July 3 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.010$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.990$

Expected Value of Point Depth (mm.): $E(Y) = 17.294$

Variance of Point Depth (mm. sq.): $Var(Y) = 55.486$

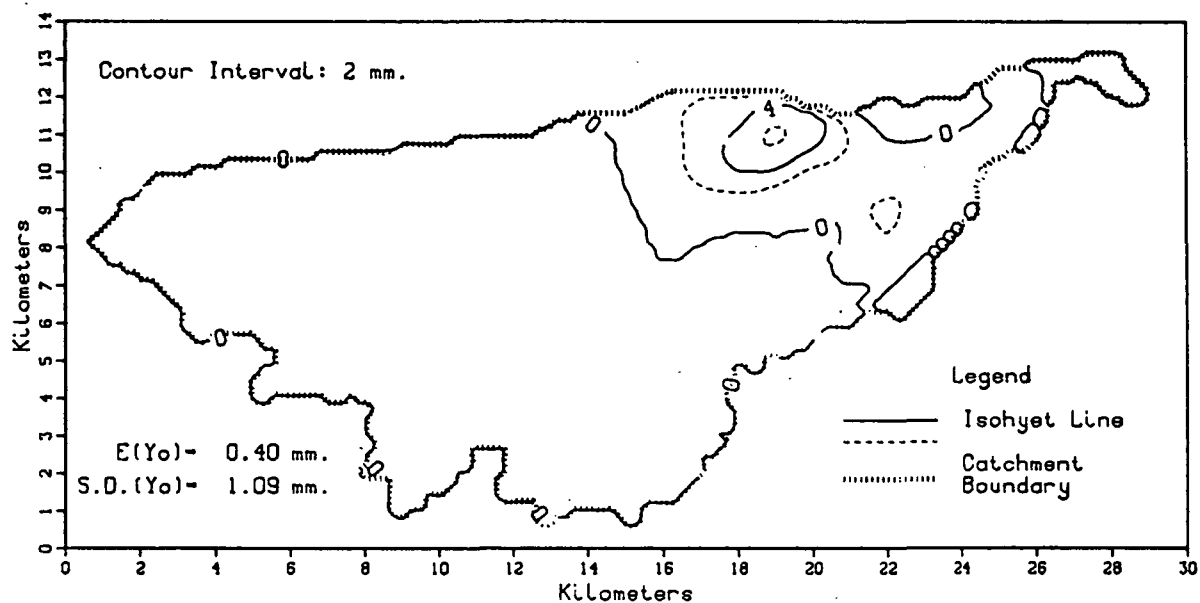
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.515$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.988	0.0	1.000	0.00	1.000
3	0.983	0.2	0.990	0.04	0.947
5	0.971	0.4	0.965	0.16	0.893
7	0.959	0.6	0.928	0.36	0.844
9	0.936	0.8	0.882	0.64	0.806
11	0.867	1.0	0.829	1.00	0.770
13	0.669	1.2	0.774	1.44	0.734
15	0.518	1.4	0.719	1.96	0.703
17	0.432	1.6	0.664	2.56	0.672
19	0.362	1.8	0.610	3.24	0.641
21	0.297	2.0	0.558	4.00	0.610
23	0.231	2.2	0.506	4.84	0.579
25	0.167	2.4	0.455	5.76	0.549
27	0.102	2.6	0.404	6.76	0.519
29	0.073	2.8	0.354	7.84	0.491
31	0.057	3.0	0.305	9.00	0.464
33	0.041	3.2	0.256	10.24	0.439
35	0.023	3.4	0.209	11.56	0.415
37	0.008	3.6	0.165	12.96	0.393
39	0.002	3.8	0.122	14.44	0.371
		4.2	0.047	17.64	0.330
		4.4	0.013	19.36	0.309
		4.6	-0.017	21.16	0.287
		4.8	-0.044	23.04	0.264
		5.0	-0.073	25.00	0.239
		5.2	-0.100	27.04	0.208
		5.4	-0.128	29.16	0.173
		5.6	-0.157	31.36	0.135
		5.8	-0.184	33.64	0.089
		6.0	-0.211	36.00	0.051

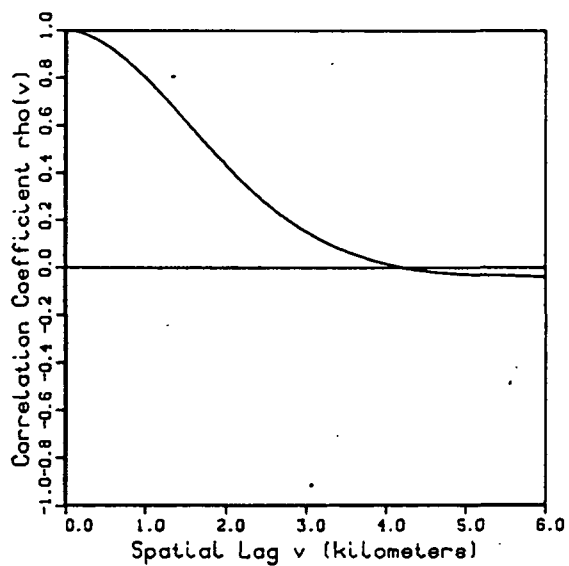
Walnut Gulch, Arizona

Ac=154.21 sq.km.

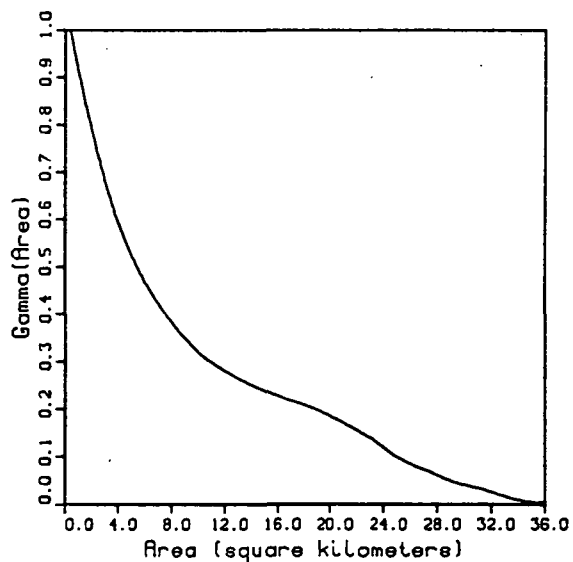
Storm Day
July 4, 1977



Spatial Correlation



Variance Function



Storm Day July 4 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.757$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.243$

Expected Value of Point Depth (mm.): $E(Y) = 0.307$

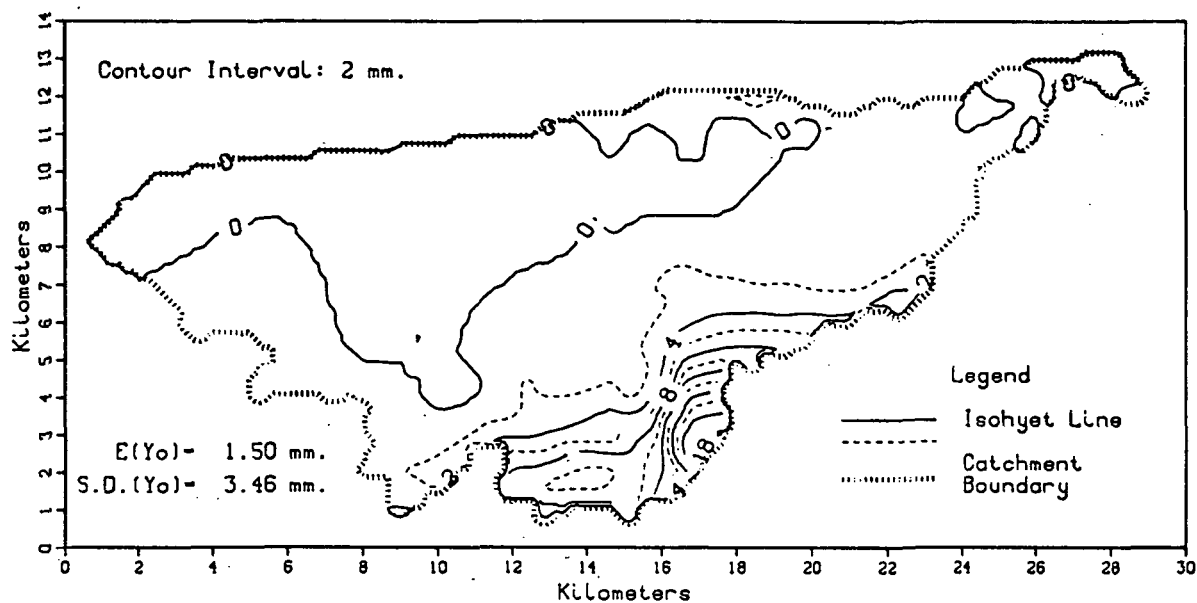
Variance of Point Depth (mm. sq.): $Var(Y) = 0.843$

Coef. of Skewness of Point Depth: $S.C.(Y) = 3.874$

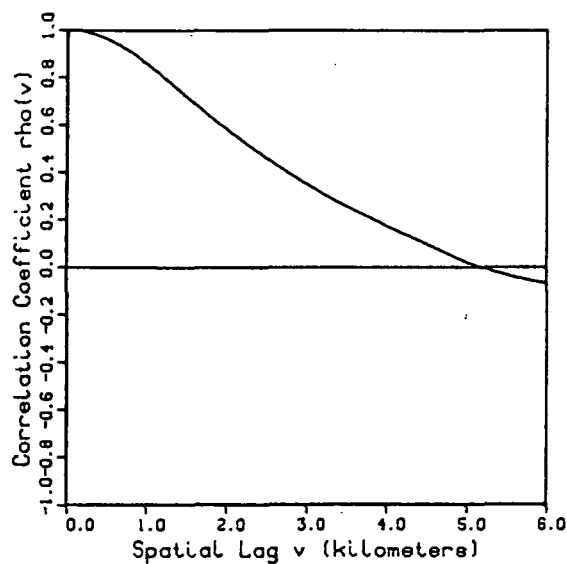
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.098	0.0	1.000	0.00	1.000
2	0.059	0.2	0.988	0.04	1.018
3	0.034	0.4	0.958	0.16	1.018
4	0.021	0.6	0.913	0.36	0.998
5	0.011	0.8	0.859	0.64	0.960
6	0.001	1.0	0.795	1.00	0.911
7	0.000	1.2	0.725	1.44	0.854
		1.4	0.651	1.96	0.790
		1.6	0.575	2.56	0.722
		1.8	0.500	3.24	0.654
		2.0	0.427	4.00	0.590
		2.2	0.358	4.84	0.531
		2.4	0.295	5.76	0.477
		2.6	0.239	6.76	0.428
		2.8	0.191	7.84	0.385
		3.0	0.148	9.00	0.346
		3.2	0.111	10.24	0.311
		3.4	0.080	11.56	0.286
		3.6	0.053	12.96	0.263
		3.8	0.031	14.44	0.244
		4.0	0.013	16.00	0.226
		4.2	-.002	17.64	0.210
		4.4	-.013	19.36	0.192
		4.6	-.022	21.16	0.167
		4.8	-.028	23.04	0.137
		5.0	-.032	25.00	0.097
		5.2	-.035	27.04	0.072
		5.4	-.036	29.16	0.047
		5.6	-.038	31.36	0.031
		5.8	-.040	33.64	0.011
		6.0	-.043	36.00	0.002

Walnut Gulch, Arizona
Ac=154.21 sq.km.

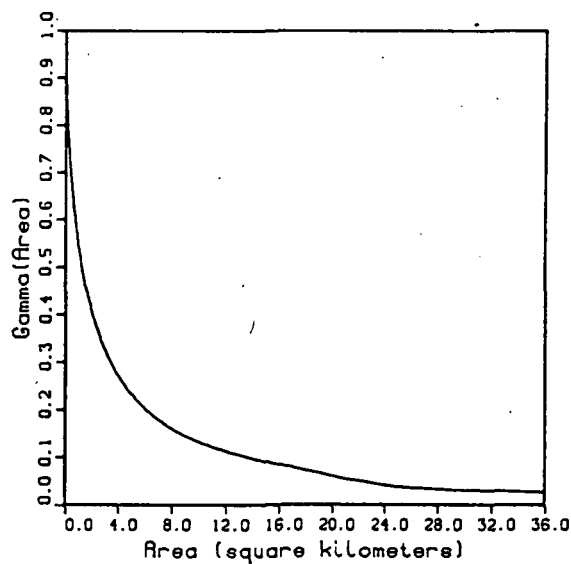
Storm Day
July 5, 1977



Spatial Correlation



Variance Function



Storm Day July 5 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.332$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.668$

Expected Value of Point Depth (mm.): $E(Y) = 1.631$

Variance of Point Depth (mm. sq.): $Var(Y) = 10.968$

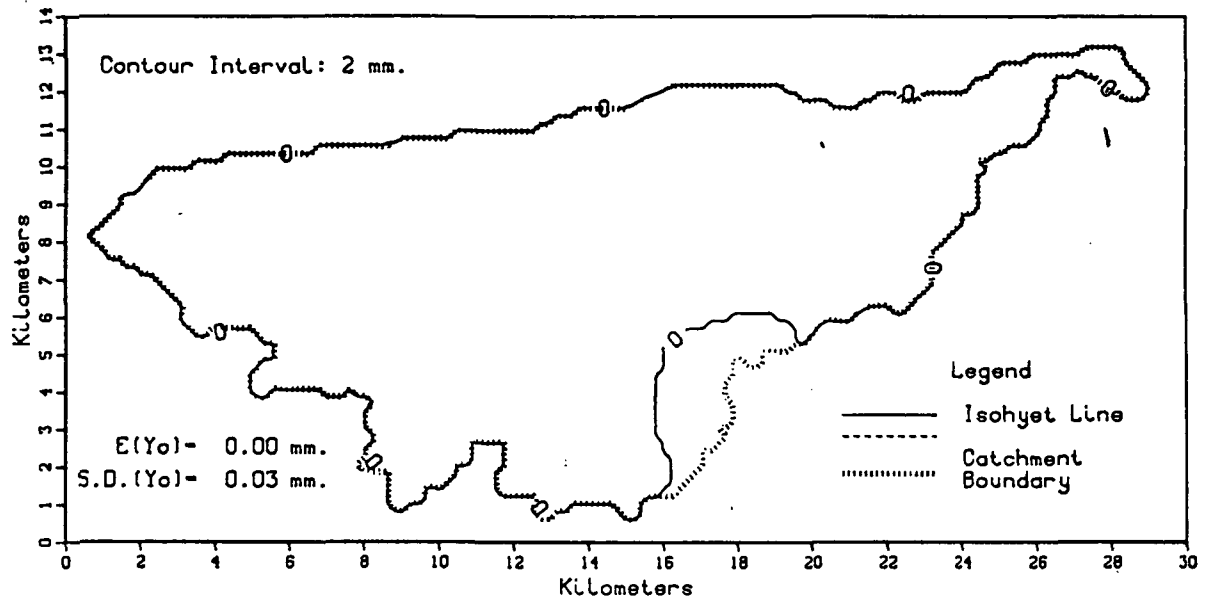
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.336$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km. sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.311	0.0	1.000	0.00	1.000
2	0.185	0.2	0.993	0.04	0.905
3	0.138	0.4	0.974	0.16	0.812
4	0.113	0.6	0.944	0.36	0.716
5	0.094	0.8	0.904	0.64	0.629
6	0.083	1.0	0.855	1.00	0.548
7	0.072	1.2	0.801	1.44	0.474
8	0.063	1.4	0.744	1.96	0.410
9	0.052	1.6	0.687	2.56	0.355
10	0.034	1.8	0.632	3.24	0.308
11	0.024	2.0	0.579	4.00	0.269
12	0.021	2.2	0.529	4.84	0.235
13	0.018	2.4	0.481	5.76	0.207
14	0.016	2.6	0.434	6.76	0.182
15	0.013	2.8	0.390	7.84	0.160
16	0.012	3.0	0.348	9.00	0.143
17	0.010	3.2	0.308	10.24	0.129
18	0.008	3.4	0.271	11.56	0.116
19	0.007	3.6	0.237	12.96	0.104
20	0.005	3.8	0.204	14.44	0.093
21	0.003	4.0	0.173	16.00	0.084
22	0.002	4.2	0.141	17.64	0.074
23	0.000	4.4	0.111	19.36	0.063
24	0.000	4.6	0.080	21.16	0.053
		4.8	0.048	23.04	0.044
		5.0	0.017	25.00	0.036
		5.2	-0.005	27.04	0.033
		5.4	-0.026	29.16	0.030
		5.6	-0.044	31.36	0.028
		5.8	-0.060	33.64	0.027
		6.0	-0.072	36.00	0.025

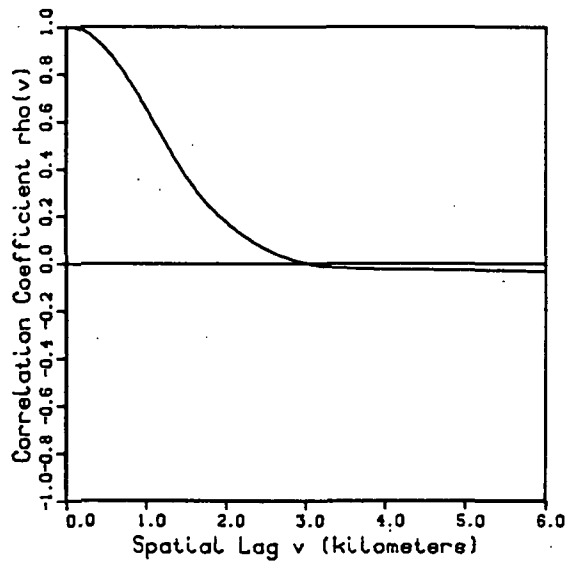
Walnut Gulch, Arizona

Ac=154.21 sq.km.

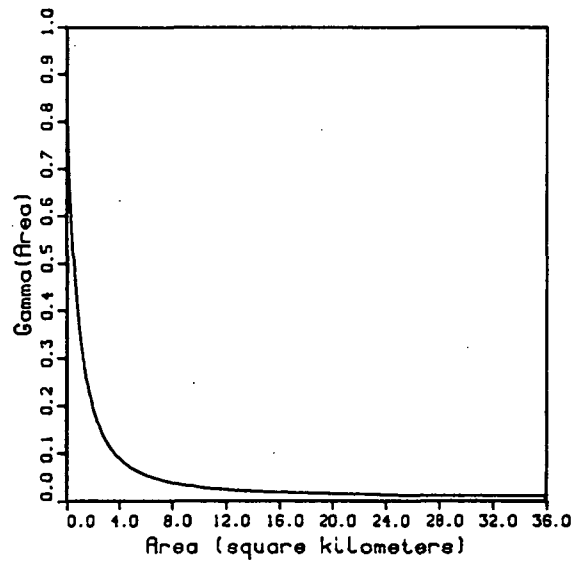
Storm Day
July 8, 1977



Spatial Correlation



Variance Function



Storm Day July 8 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.946$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.054$

Expected Value of Point Depth (mm.): $E(Y) = 0.006$

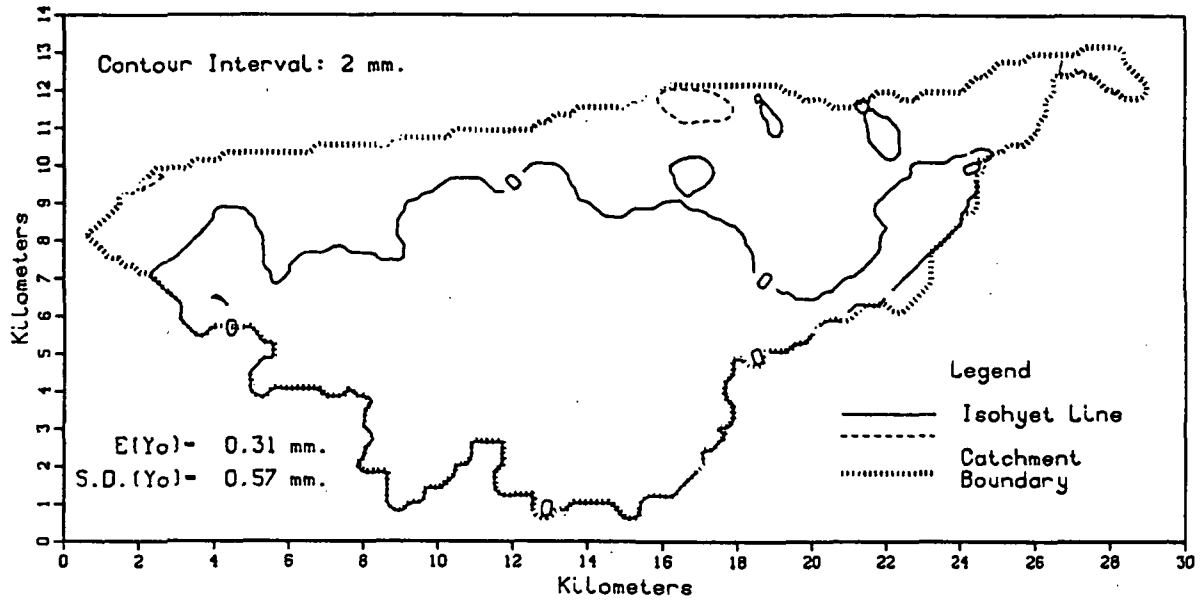
Variance of Point Depth (mm. sq.): $Var(Y) = 0.001$

Coef. of Skewness of Point Depth: $S.C.(Y) = 6.922$

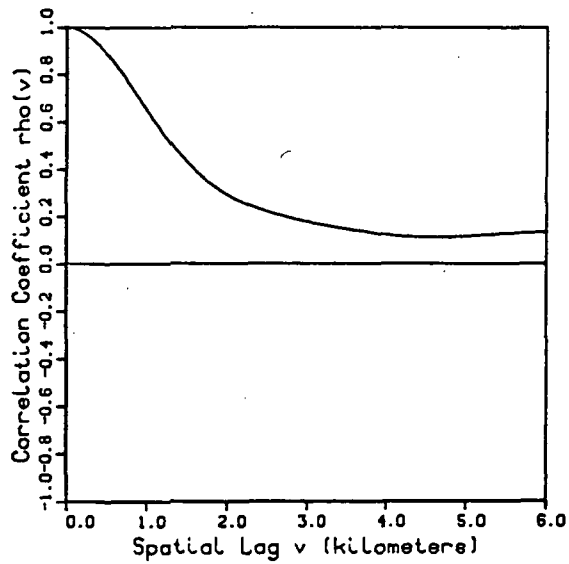
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.983	0.04	0.864
		0.4	0.934	0.16	0.732
		0.6	0.858	0.36	0.590
		0.8	0.761	0.64	0.467
		1.0	0.649	1.00	0.358
		1.2	0.531	1.44	0.268
		1.4	0.417	1.96	0.199
		1.6	0.318	2.56	0.149
		1.8	0.236	3.24	0.114
		2.0	0.173	4.00	0.088
		2.2	0.121	4.84	0.070
		2.4	0.077	5.76	0.056
		2.6	0.042	6.76	0.046
		2.8	0.016	7.84	0.038
		3.0	-.001	9.00	0.032
		3.2	-.013	10.24	0.027
		3.4	-.020	11.56	0.024
		3.6	-.023	12.96	0.021
		3.8	-.025	14.44	0.019
		4.0	-.026	16.00	0.017
		4.2	-.027	17.64	0.016
		4.4	-.028	19.36	0.015
		4.6	-.029	21.16	0.014
		4.8	-.029	23.04	0.012
		5.0	-.030	25.00	0.011
		5.2	-.031	27.04	0.010
		5.4	-.032	29.16	0.009
		5.6	-.033	31.36	0.009
		5.8	-.035	33.64	0.010
		6.0	-.036	36.00	0.010

Walnut Gulch, Arizona
Ac=154.21 sq.km.

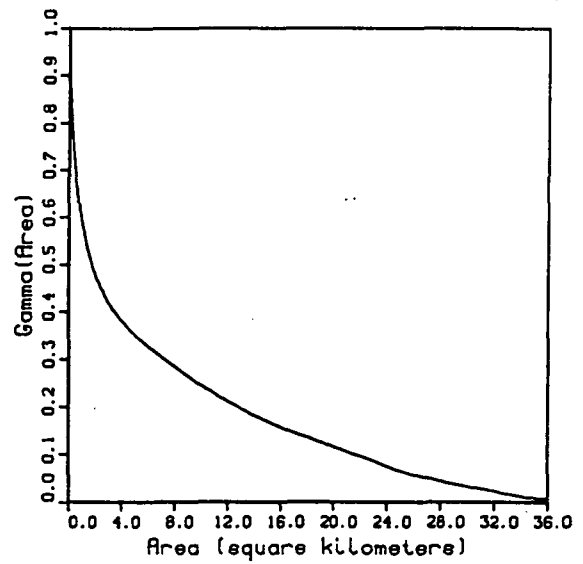
Storm Day
July 9, 1977



Spatial Correlation



Variance Function



Storm Day July 9 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.584$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.416$

Expected Value of Point Depth (mm.): $E(Y) = 0.232$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.196$

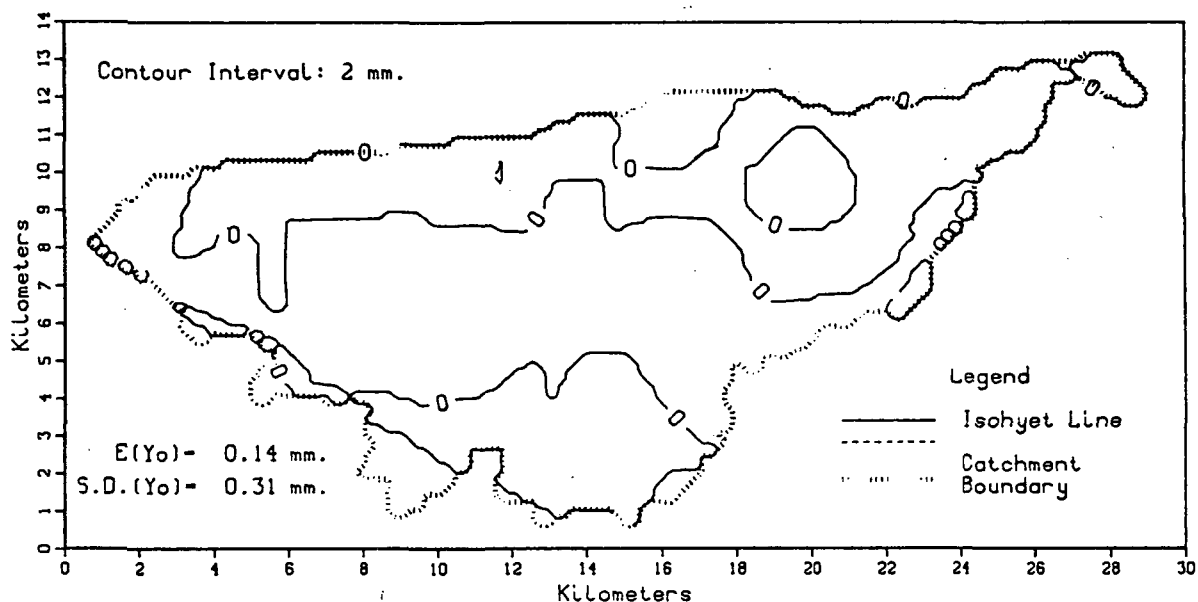
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.738$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.067	0.0	1.000	0.00	1.000
2	0.009	0.2	0.979	0.04	0.921
3	0.002	0.4	0.924	0.16	0.836
4	0.000	0.6	0.845	0.36	0.749
		0.8	0.749	0.64	0.668
		1.0	0.648	1.00	0.595
		1.2	0.551	1.44	0.532
		1.4	0.465	1.96	0.482
		1.6	0.393	2.56	0.442
		1.8	0.336	3.24	0.408
		2.0	0.292	4.00	0.380
		2.2	0.257	4.84	0.354
		2.4	0.231	5.76	0.331
		2.6	0.210	6.76	0.308
		2.8	0.193	7.84	0.285
		3.0	0.177	9.00	0.262
		3.2	0.164	10.24	0.239
		3.4	0.153	11.56	0.217
		3.6	0.142	12.96	0.195
		3.8	0.131	14.44	0.175
		4.0	0.122	16.00	0.155
		4.2	0.116	17.64	0.138
		4.4	0.113	19.36	0.121
		4.6	0.112	21.16	0.103
		4.8	0.114	23.04	0.085
		5.0	0.118	25.00	0.063
		5.2	0.122	27.04	0.050
		5.4	0.127	29.16	0.035
		5.6	0.131	31.36	0.026
		5.8	0.134	33.64	0.012
		6.0	0.134	36.00	0.005

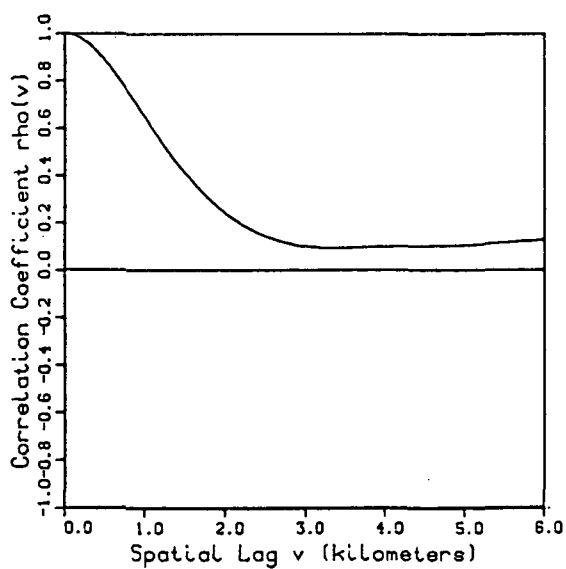
Walnut Gulch, Arizona

$A_c = 154.21$ sq.km.

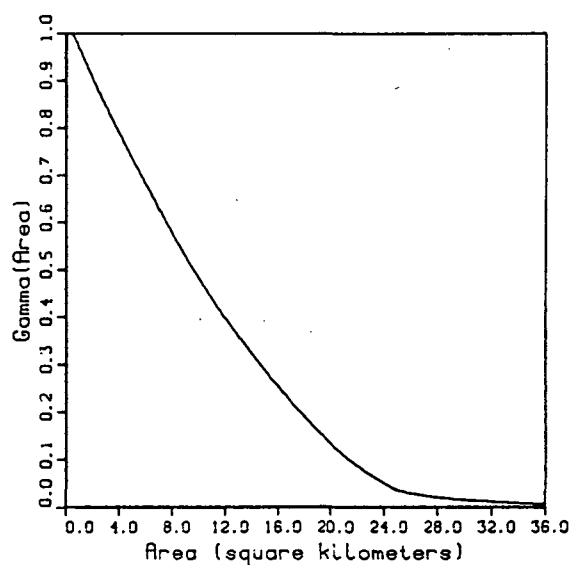
Storm Day
July 10, 1977



Spatial Correlation



Variance Function



Storm Day July 10 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.415$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.585$

Expected Value of Point Depth (mm.): $E(Y) = 0.197$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.096$

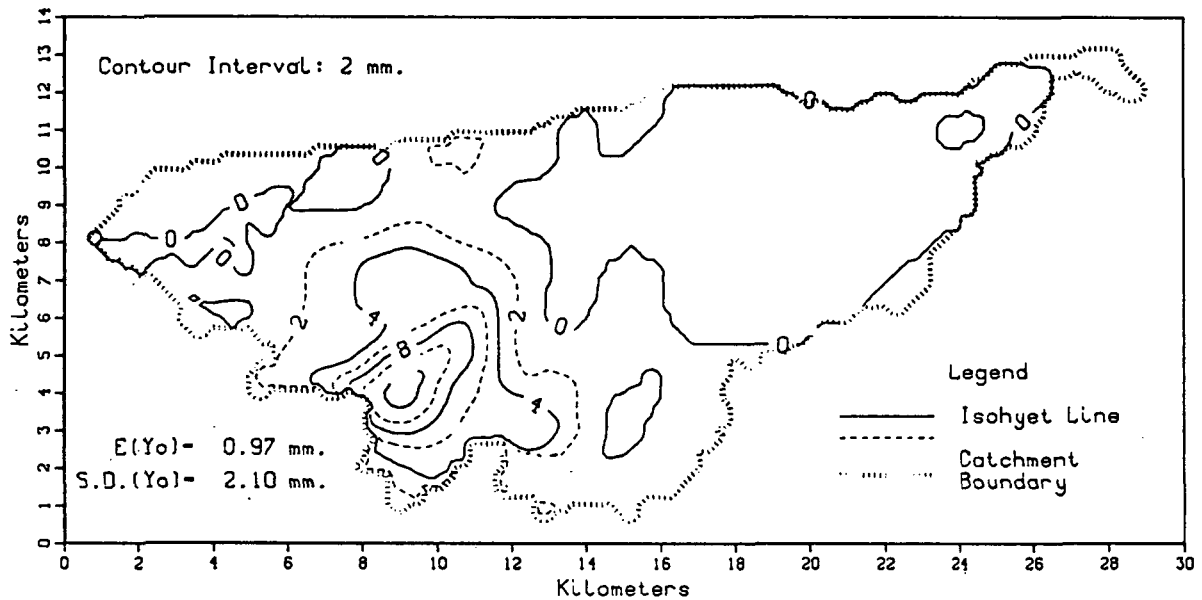
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.979$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.046	0.0	1.000	0.00	1.000
2	0.000	0.2	0.979	0.04	1.014
		0.4	0.922	0.16	1.017
		0.6	0.841	0.36	1.010
		0.8	0.746	0.64	0.993
		1.0	0.645	1.00	0.969
		1.2	0.545	1.44	0.941
		1.4	0.452	1.96	0.908
		1.6	0.370	2.56	0.870
		1.8	0.299	3.24	0.830
		2.0	0.240	4.00	0.787
		2.2	0.193	4.84	0.741
		2.4	0.157	5.76	0.691
		2.6	0.130	6.76	0.638
		2.8	0.111	7.84	0.582
		3.0	0.100	9.00	0.525
		3.2	0.094	10.24	0.468
		3.4	0.094	11.56	0.412
		3.6	0.096	12.96	0.358
		3.8	0.098	14.44	0.305
		4.0	0.100	16.00	0.251
		4.2	0.102	17.64	0.198
		4.4	0.102	19.36	0.148
		4.6	0.103	21.16	0.104
		4.8	0.104	23.04	0.066
		5.0	0.107	25.00	0.035
		5.2	0.111	27.04	0.023
		5.4	0.116	29.16	0.016
		5.6	0.121	31.36	0.012
		5.8	0.126	33.64	0.008
		6.0	0.131	36.00	0.005

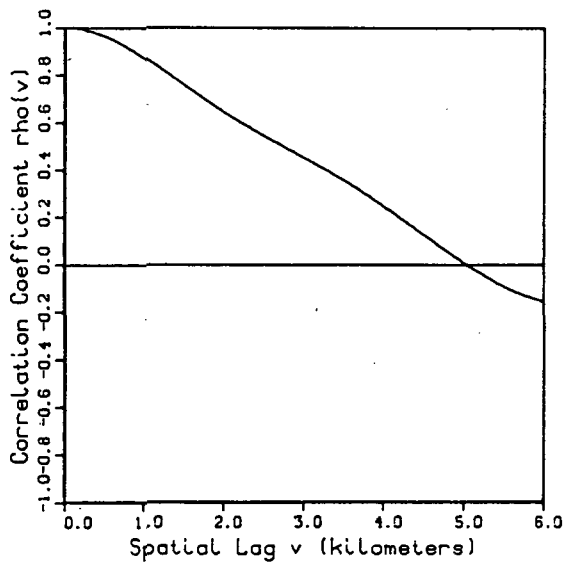
Walnut Gulch, Arizona

Ac=154.21 sq.km.

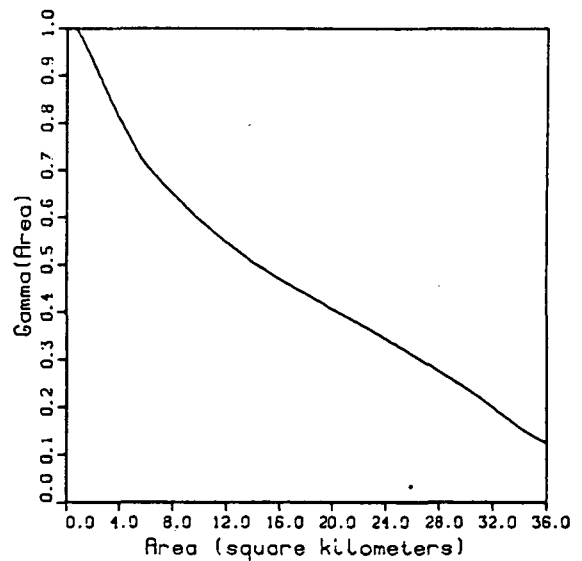
Storm Day
July 11, 1977



Spatial Correlation



Variance Function



Storm Day July 11 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.406$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.594$

Expected Value of Point Depth (mm.): $E(Y) = 1.294$

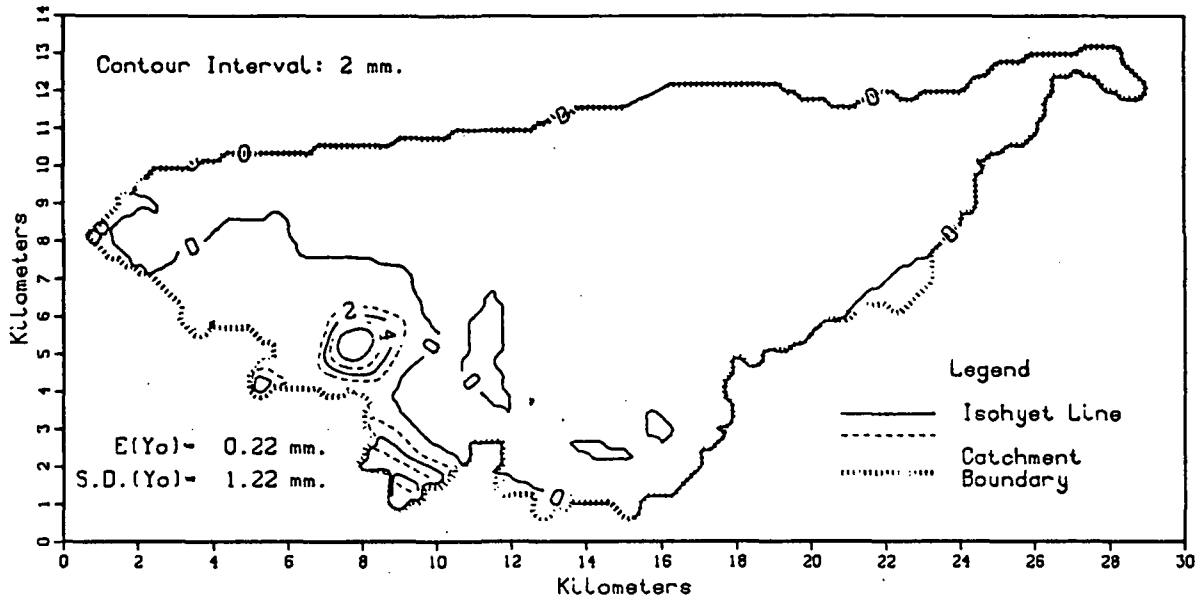
Variance of Point Depth (mm. sq.): $Var(Y) = 5.727$

Coef. of Skewness of Point Depth: $S.C.(Y) = 2.356$

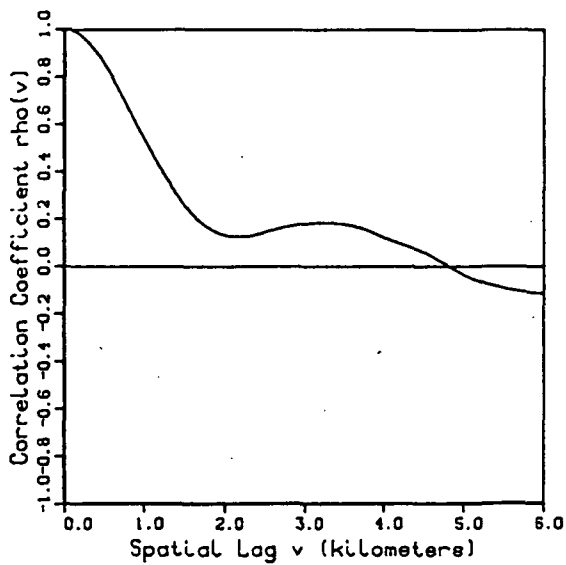
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.285	0.0	1.000	0.00	1.000
2	0.223	0.2	0.993	0.04	1.015
3	0.173	0.4	0.975	0.16	1.020
4	0.129	0.6	0.947	0.36	1.015
5	0.085	0.8	0.911	0.64	1.004
6	0.057	1.0	0.869	1.00	0.985
7	0.044	1.2	0.824	1.44	0.961
8	0.034	1.4	0.777	1.96	0.929
9	0.025	1.6	0.730	2.56	0.891
10	0.017	1.8	0.684	3.24	0.851
11	0.011	2.0	0.640	4.00	0.806
12	0.004	2.2	0.599	4.84	0.762
13	0.000	2.4	0.560	5.76	0.716
		2.6	0.522	6.76	0.684
		2.8	0.486	7.84	0.651
		3.0	0.449	9.00	0.619
		3.2	0.412	10.24	0.587
		3.4	0.374	11.56	0.555
		3.6	0.333	12.96	0.525
		3.8	0.289	14.44	0.495
		4.0	0.243	16.00	0.468
		4.2	0.196	17.64	0.441
		4.4	0.147	19.36	0.415
		4.6	0.099	21.16	0.386
		4.8	0.052	23.04	0.357
		5.0	0.006	25.00	0.325
		5.2	-.038	27.04	0.290
		5.4	-.077	29.16	0.253
		5.6	-.110	31.36	0.212
		5.8	-.138	33.64	0.162
		6.0	-.158	36.00	0.124

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq. km.}$

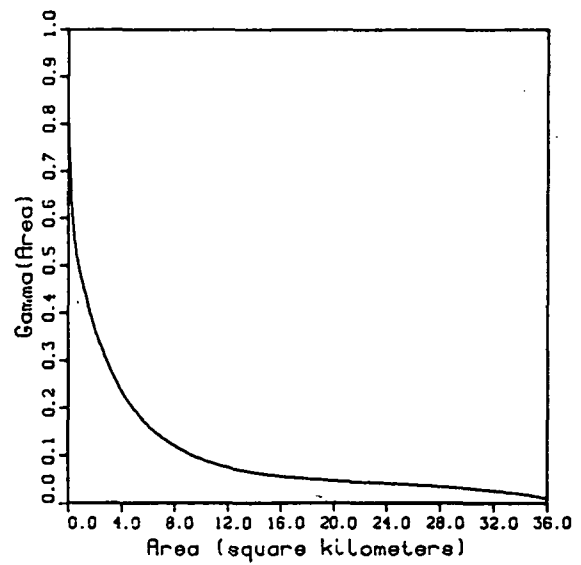
Storm Day
 July 12, 1977



Spatial Correlation



Variance Function



Storm Day July 12 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.792$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.208$

Expected Value of Point Depth (mm.): $E(Y) = 0.290$

Variance of Point Depth (mm. sq.): $Var(Y) = 1.508$

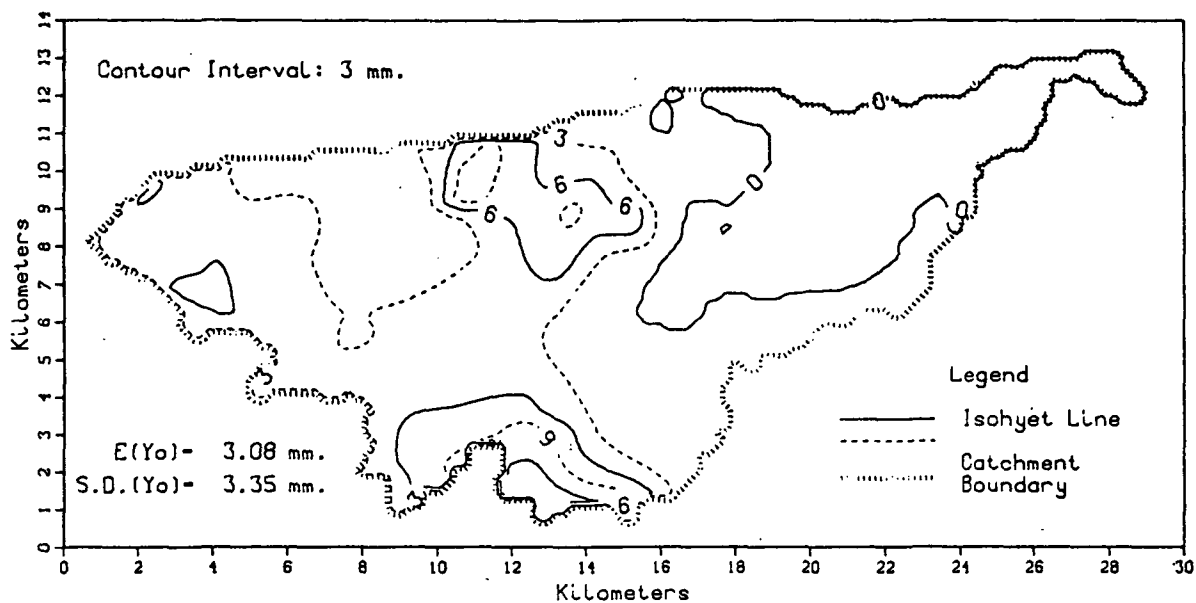
Coef. of Skewness of Point Depth: $S.C.(Y) = 5.854$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.052	0.0	1.000	0.00	1.000
2	0.036	0.2	0.975	0.04	0.829
3	0.029	0.4	0.901	0.16	0.693
4	0.023	0.6	0.792	0.36	0.600
5	0.019	0.8	0.663	0.64	0.522
6	0.015	1.0	0.534	1.00	0.471
7	0.010	1.2	0.409	1.44	0.420
8	0.006	1.4	0.298	1.96	0.369
9	0.002	1.6	0.214	2.56	0.320
10	0.001	1.8	0.159	3.24	0.274
11	0.000	2.0	0.128	4.00	0.233
12	0.000	2.2	0.123	4.84	0.198
13	0.000	2.4	0.135	5.76	0.168
14	0.000	2.6	0.154	6.76	0.143
		2.8	0.170	7.84	0.122
		3.0	0.180	9.00	0.104
		3.2	0.184	10.24	0.089
		3.4	0.180	11.56	0.078
		3.6	0.169	12.96	0.068
		3.8	0.147	14.44	0.061
		4.0	0.118	16.00	0.055
		4.2	0.092	17.64	0.051
		4.4	0.069	19.36	0.047
		4.6	0.038	21.16	0.044
		4.8	-.002	23.04	0.041
		5.0	-.042	25.00	0.039
		5.2	-.068	27.04	0.035
		5.4	-.088	29.16	0.031
		5.6	-.103	31.36	0.026
		5.8	-.114	33.64	0.019
		6.0	-.119	36.00	0.009

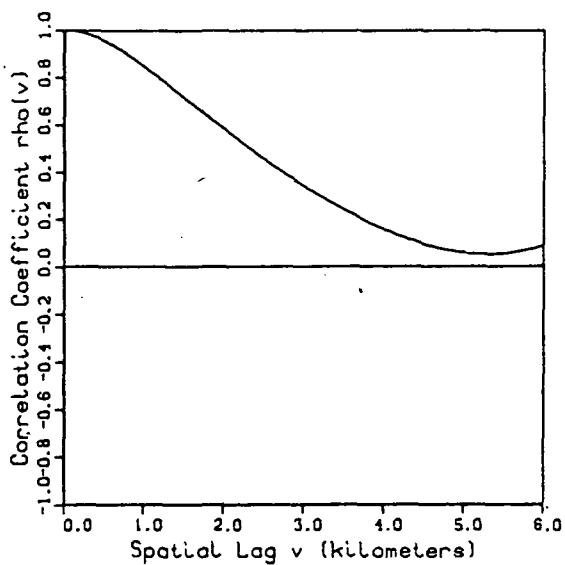
Walnut Gulch, Arizona

Ac=154.21 sq.km.

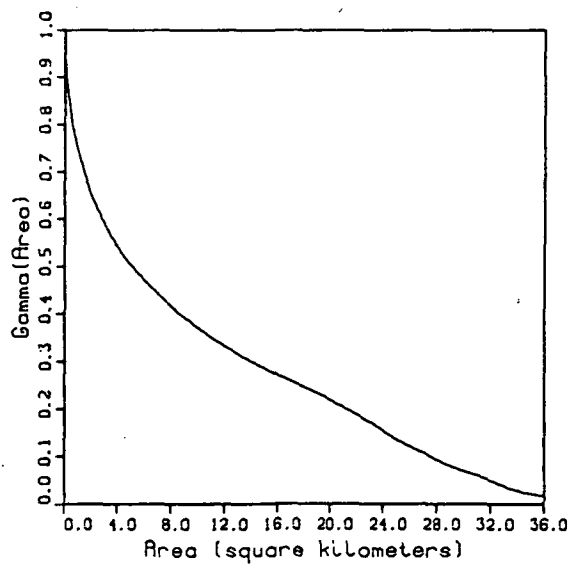
Storm Day
July 13, 1977



Spatial Correlation



Variance Function



Storm Day July 13 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.213$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.787$

Expected Value of Point Depth (mm.): $E(Y) = 2.902$

Variance of Point Depth (mm. sq.): $Var(Y) = 8.763$

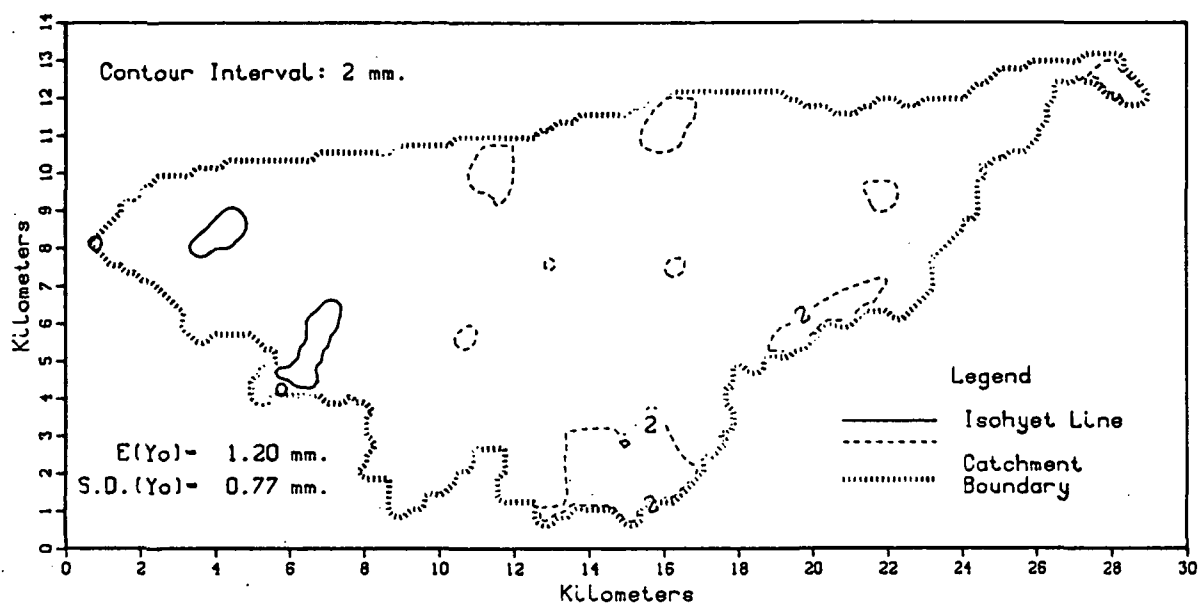
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.073$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.608	0.0	1.000	0.00	1.000
2	0.521	0.2	0.992	0.04	0.950
3	0.442	0.4	0.970	0.16	0.894
4	0.339	0.6	0.937	0.36	0.842
5	0.209	0.8	0.895	0.64	0.791
6	0.140	1.0	0.847	1.00	0.745
7	0.090	1.2	0.796	1.44	0.699
8	0.060	1.4	0.743	1.96	0.654
9	0.036	1.6	0.689	2.56	0.613
10	0.022	1.8	0.636	3.24	0.575
11	0.014	2.0	0.584	4.00	0.540
12	0.009	2.2	0.533	4.84	0.507
13	0.005	2.4	0.481	5.76	0.476
14	0.001	2.6	0.431	6.76	0.447
15	0.000	2.8	0.385	7.84	0.418
		3.0	0.341	9.00	0.391
		3.2	0.300	10.24	0.364
		3.4	0.260	11.56	0.339
		3.6	0.223	12.96	0.315
		3.8	0.188	14.44	0.292
		4.0	0.157	16.00	0.270
		4.2	0.129	17.64	0.249
		4.4	0.105	19.36	0.226
		4.6	0.084	21.16	0.200
		4.8	0.069	23.04	0.170
		5.0	0.059	25.00	0.134
		5.2	0.053	27.04	0.106
		5.4	0.053	29.16	0.077
		5.6	0.061	31.36	0.056
		5.8	0.074	33.64	0.030
		6.0	0.091	36.00	0.017

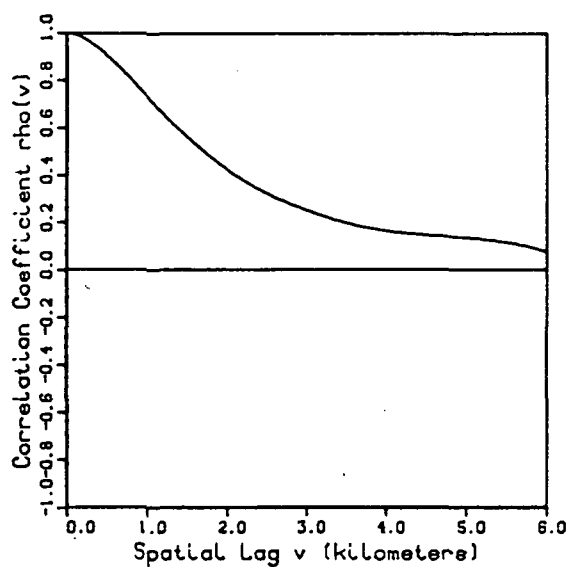
Walnut Gulch, Arizona

Ac=154.21 sq.km.

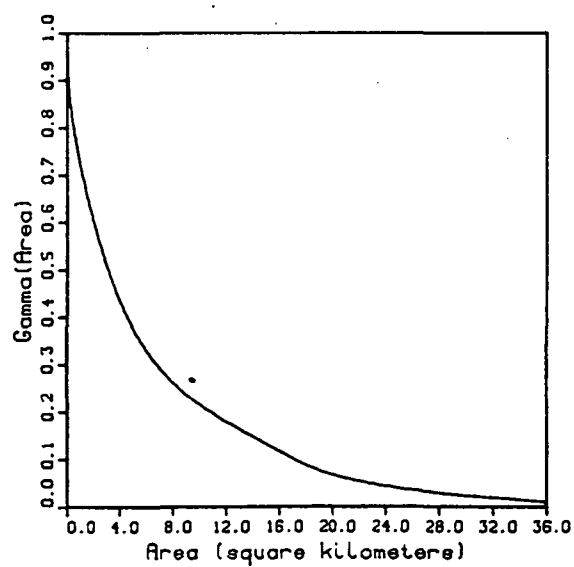
Storm Day
July 14, 1977



Spatial Correlation



Variance Function



Storm Day July 14 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.011$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.989$

Expected Value of Point Depth (mm.): $E(Y) = 1.172$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.453$

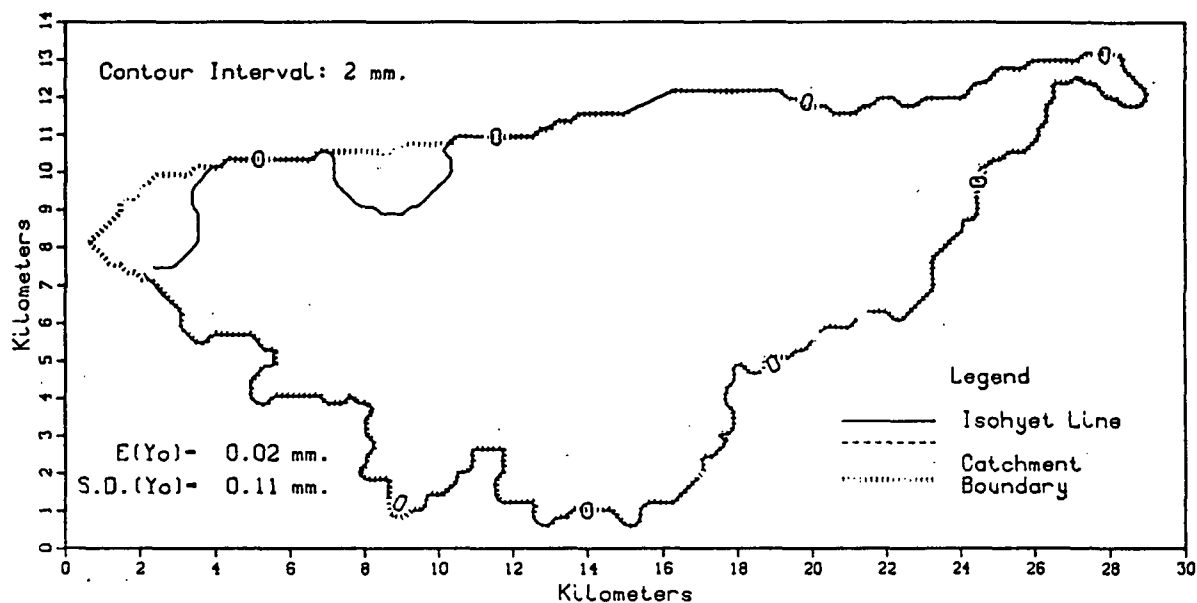
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.579$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y>y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.594	0.0	1.000	0.00	1.000
2	0.083	0.2	0.978	0.04	0.945
3	0.017	0.4	0.932	0.16	0.885
4	0.000	0.6	0.871	0.36	0.829
5	0.000	0.8	0.801	0.64	0.776
		1.0	0.728	1.00	0.720
		1.2	0.656	1.44	0.664
		1.4	0.589	1.96	0.606
		1.6	0.528	2.56	0.547
		1.8	0.472	3.24	0.488
		2.0	0.420	4.00	0.433
		2.2	0.376	4.84	0.383
		2.4	0.337	5.76	0.339
		2.6	0.304	6.76	0.299
		2.8	0.275	7.84	0.264
		3.0	0.249	9.00	0.235
		3.2	0.226	10.24	0.209
		3.4	0.204	11.56	0.185
		3.6	0.187	12.96	0.162
		3.8	0.173	14.44	0.139
		4.0	0.162	16.00	0.115
		4.2	0.154	17.64	0.090
		4.4	0.148	19.36	0.071
		4.6	0.144	21.16	0.058
		4.8	0.139	23.04	0.046
		5.0	0.135	25.00	0.038
		5.2	0.128	27.04	0.030
		5.4	0.120	29.16	0.024
		5.6	0.109	31.36	0.019
		5.8	0.094	33.64	0.015
		6.0	0.075	36.00	0.008

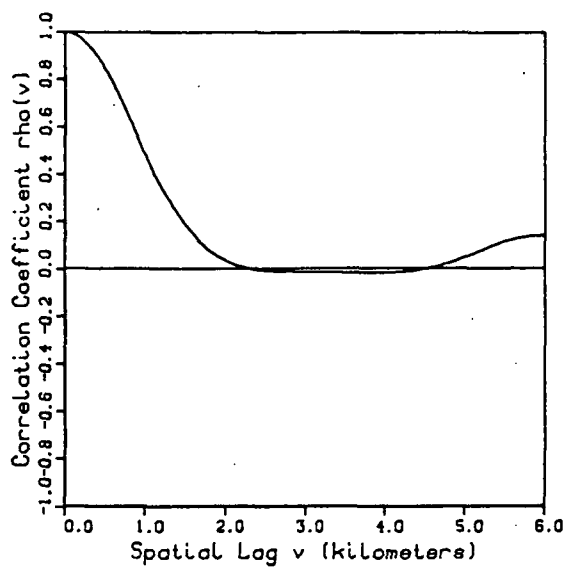
Walnut Gulch, Arizona

Ac=154.21 sq.km.

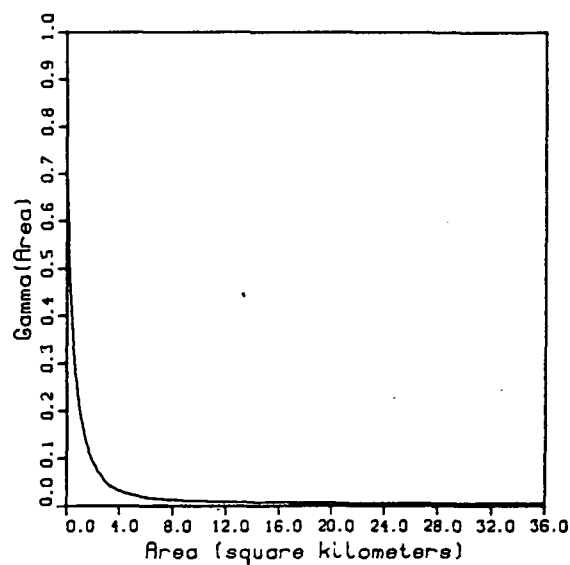
Storm Day
July 16, 1977



Spatial Correlation



Variance Function



Storm Day July 16 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.941$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.059$

Expected Value of Point Depth (mm.): $E(Y) = 0.014$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.006$

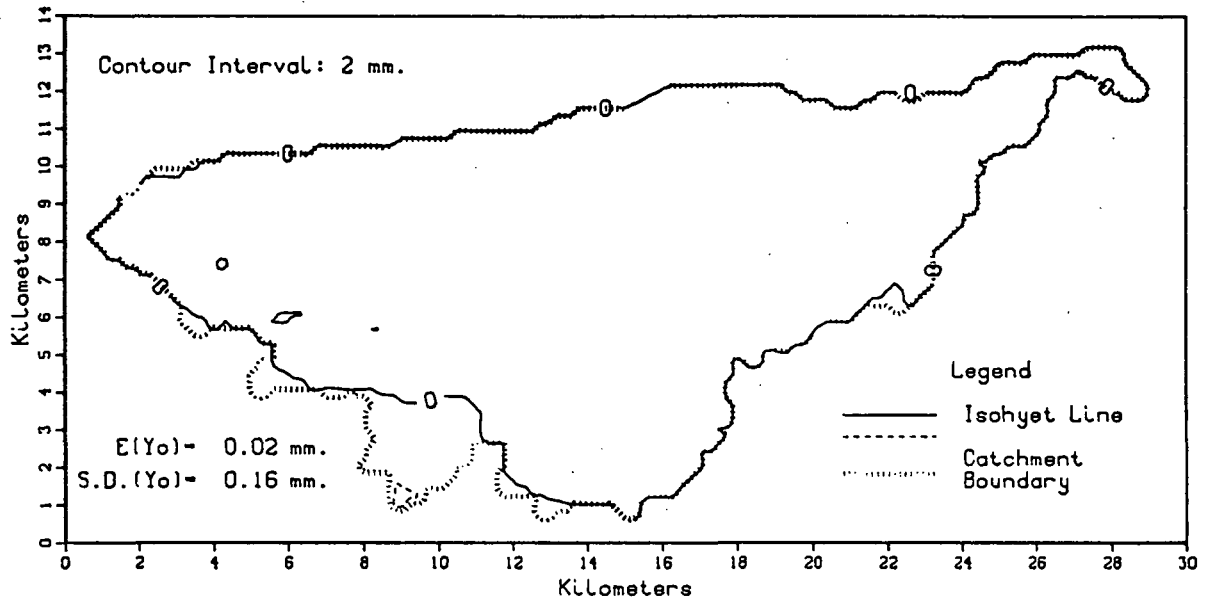
Coef. of Skewness of Point Depth: $S.C.(Y) = 6.622$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.970	0.04	0.753
		0.4	0.899	0.16	0.565
		0.6	0.782	0.36	0.409
		0.8	0.634	0.64	0.291
		1.0	0.481	1.00	0.200
		1.2	0.342	1.44	0.136
		1.4	0.230	1.96	0.094
		1.6	0.142	2.56	0.063
		1.8	0.075	3.24	0.042
		2.0	0.033	4.00	0.031
		2.2	0.006	4.84	0.023
		2.4	-.006	5.76	0.018
		2.6	-.011	6.76	0.015
		2.8	-.013	7.84	0.012
		3.0	-.014	9.00	0.010
		3.2	-.015	10.24	0.009
		3.4	-.017	11.56	0.008
		3.6	-.018	12.96	0.007
		3.8	-.018	14.44	0.007
		4.0	-.016	16.00	0.006
		4.2	-.013	17.64	0.006
		4.4	-.005	19.36	0.005
		4.6	0.008	21.16	0.005
		4.8	0.027	23.04	0.005
		5.0	0.052	25.00	0.004
		5.2	0.079	27.04	0.004
		5.4	0.107	29.16	0.005
		5.6	0.128	31.36	0.005
		5.8	0.139	33.64	0.004
		6.0	0.138	36.00	0.003

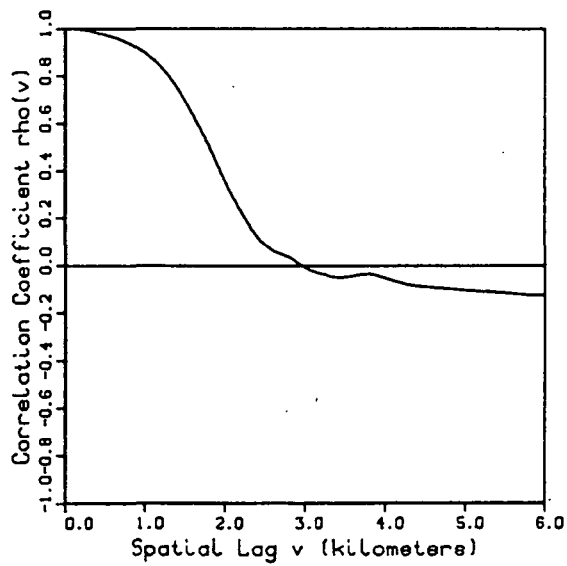
Walnut Gulch, Arizona

Ac=154.21 sq.km.

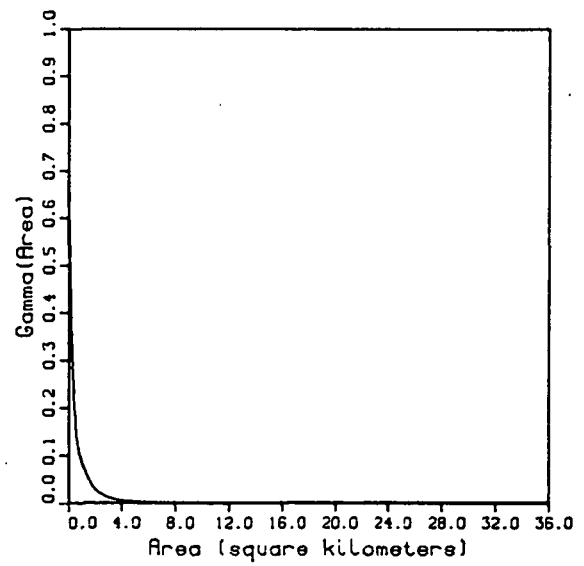
Storm Day
July 17, 1977



Spatial Correlation



Variance Function



Storm Day July 17 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.947$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.053$

Expected Value of Point Depth (mm.): $E(Y) = 0.027$

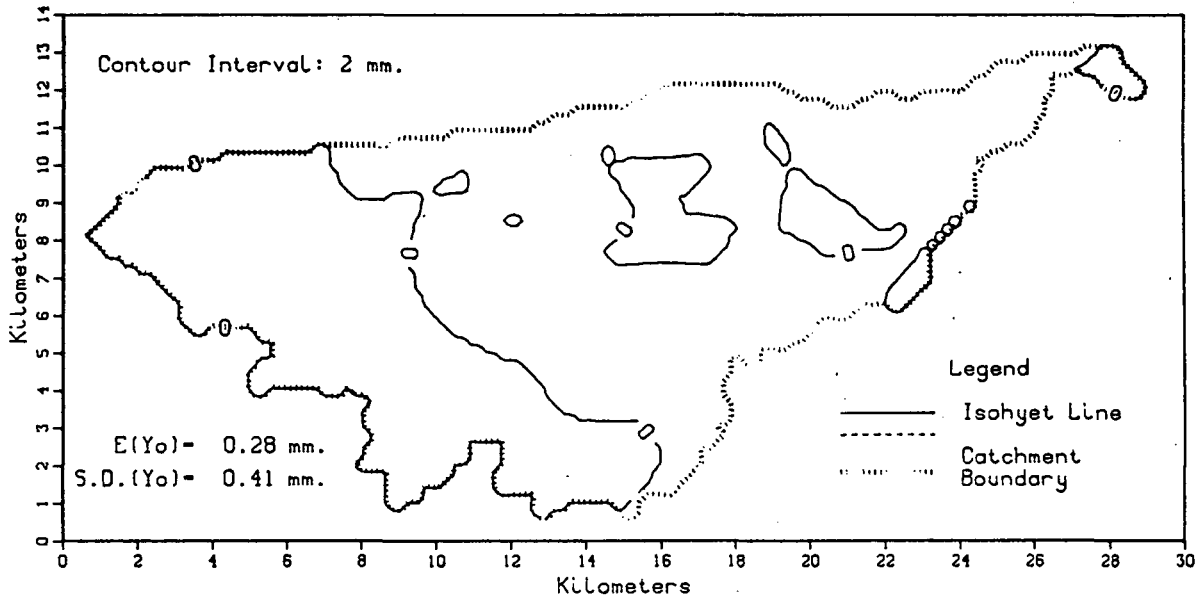
Variance of Point Depth (mm. sq.): $Var(Y) = 0.034$

Coef. of Skewness of Point Depth: $S.C.(Y) = 8.886$

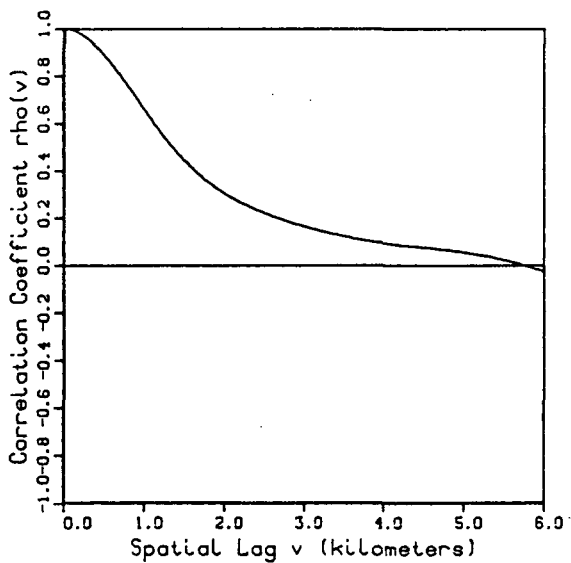
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.008	0.0	1.000	0.00	1.000
2	0.001	0.2	0.995	0.04	0.664
3	0.000	0.4	0.981	0.16	0.406
		0.6	0.962	0.36	0.244
		0.8	0.933	0.64	0.131
		1.0	0.893	1.00	0.086
		1.2	0.833	1.44	0.053
		1.4	0.746	1.96	0.028
		1.6	0.631	2.56	0.015
		1.8	0.501	3.24	0.009
		2.0	0.352	4.00	0.004
		2.2	0.229	4.84	0.002
		2.4	0.121	5.76	0.000
		2.6	0.061	6.76	0.000
		2.8	0.034	7.84	0.000
		3.0	-.011	9.00	0.000
		3.2	-.036	10.24	0.000
		3.4	-.053	11.56	0.000
		3.6	-.044	12.96	0.000
		3.8	-.036	14.44	0.000
		4.0	-.057	16.00	0.000
		4.2	-.076	17.64	0.000
		4.4	-.089	19.36	0.000
		4.6	-.096	21.16	0.000
		4.8	-.101	23.04	0.000
		5.0	-.107	25.00	0.000
		5.2	-.112	27.04	0.000
		5.4	-.117	29.16	0.000
		5.6	-.123	31.36	0.000
		5.8	-.128	33.64	0.000
		6.0	-.129	36.00	0.000

Walnut Gulch, Arizona
Ac-154.21 sq.km.

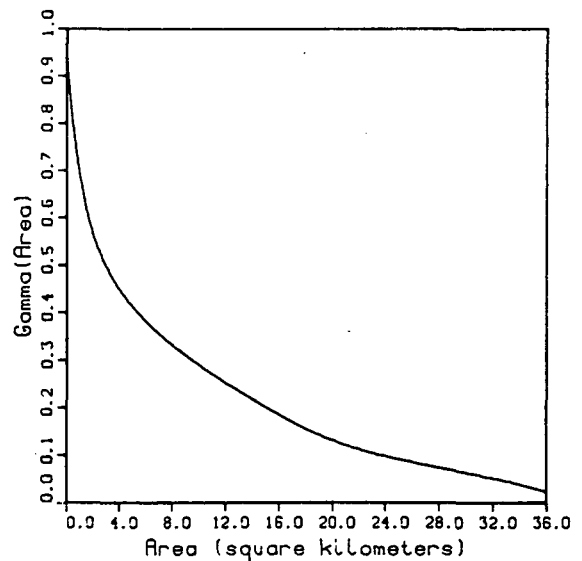
Storm Day
July 18, 1977



Spatial Correlation



Variance Function



Storm Day July 18 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.403$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.597$

Expected Value of Point Depth (mm.): $E(Y) = 0.302$

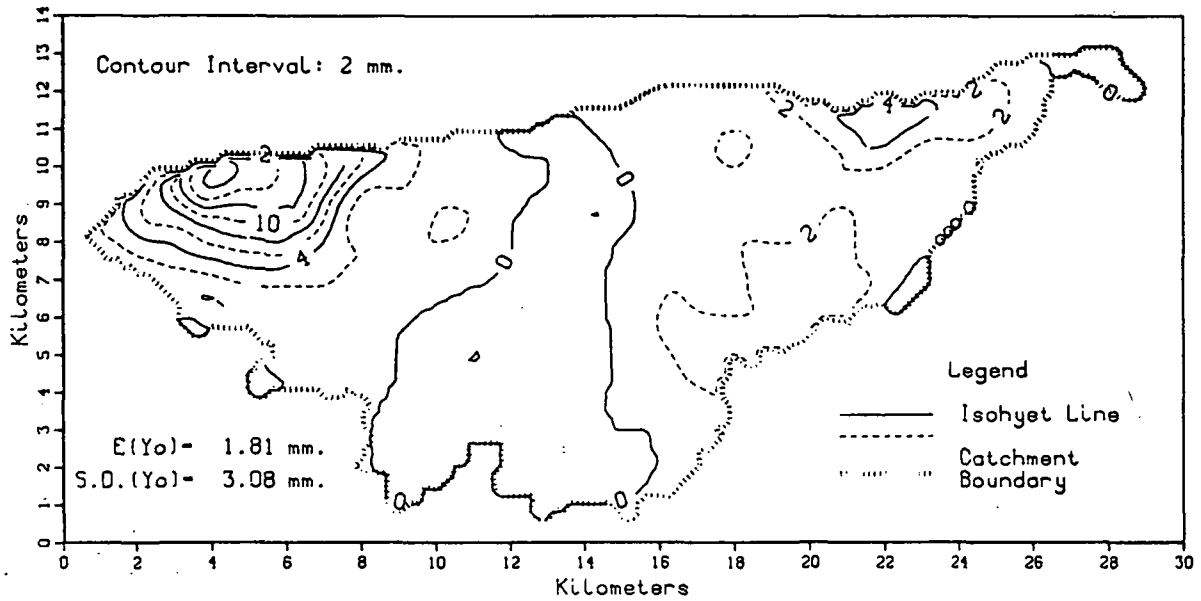
Variance of Point Depth (mm. sq.): $Var(Y) = 0.146$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.104$

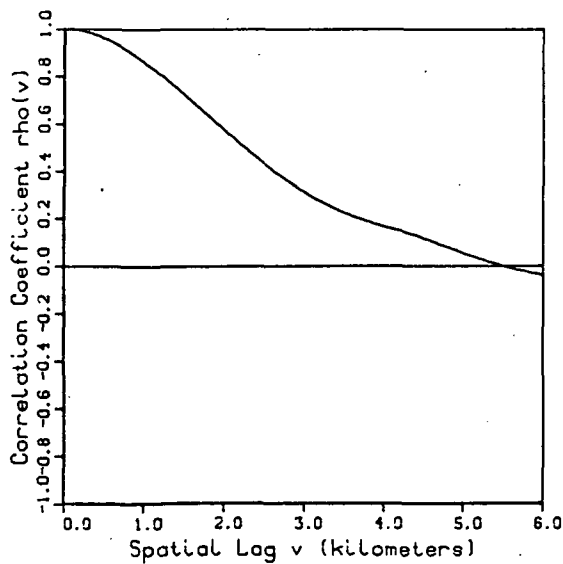
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.068	0.0	1.000	0.00	1.000
2	0.000	0.2	0.978	0.04	0.959
		0.4	0.923	0.16	0.901
		0.6	0.844	0.36	0.836
		0.8	0.753	0.64	0.766
		1.0	0.655	1.00	0.695
		1.2	0.561	1.44	0.627
		1.4	0.476	1.96	0.568
		1.6	0.406	2.56	0.522
		1.8	0.349	3.24	0.482
		2.0	0.302	4.00	0.447
		2.2	0.265	4.84	0.415
		2.4	0.234	5.76	0.386
		2.6	0.208	6.76	0.358
		2.8	0.184	7.84	0.332
		3.0	0.163	9.00	0.307
		3.2	0.144	10.24	0.282
		3.4	0.128	11.56	0.258
		3.6	0.114	12.96	0.233
		3.8	0.103	14.44	0.209
		4.0	0.092	16.00	0.184
		4.2	0.083	17.64	0.159
		4.4	0.076	19.36	0.137
		4.6	0.070	21.16	0.119
		4.8	0.063	23.04	0.102
		5.0	0.054	25.00	0.090
		5.2	0.042	27.04	0.077
		5.4	0.029	29.16	0.066
		5.6	0.013	31.36	0.054
		5.8	-0.006	33.64	0.039
		6.0	-0.027	36.00	0.021

Walnut Gulch, Arizona
Ac=154.21 sq.km.

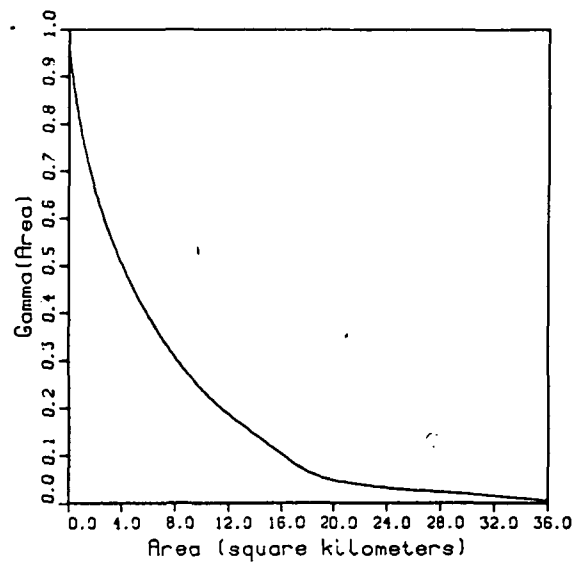
Storm Day
July 19, 1977



Spatial Correlation



Variance Function



Storm Day July 19 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.258$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.742$

Expected Value of Point Depth (mm.): $E(Y) = 1.733$

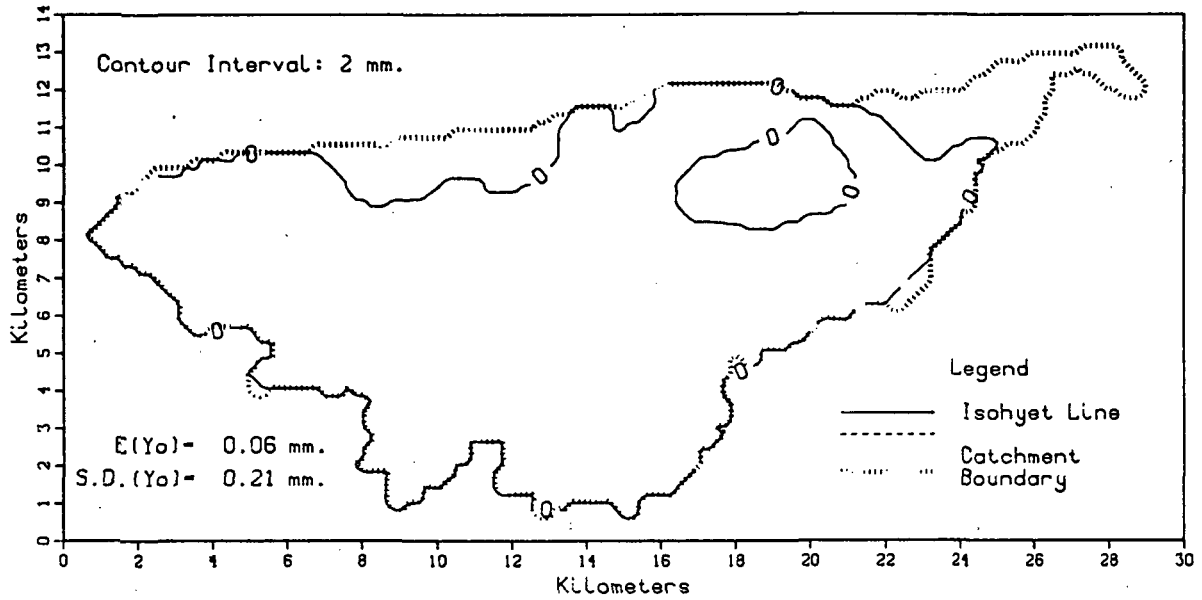
Variance of Point Depth (mm. sq.): $Var(Y) = 7.711$

Coef. of Skewness of Point Depth: $S.C.(Y) = 2.976$

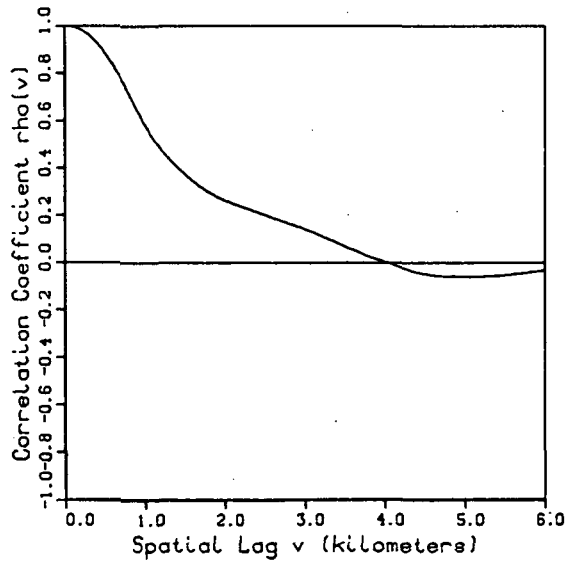
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.499	0.0	1.000	0.00	1.000
2	0.251	0.2	0.993	0.04	0.977
3	0.144	0.4	0.975	0.16	0.939
4	0.101	0.6	0.946	0.36	0.890
5	0.082	0.8	0.908	0.64	0.834
6	0.067	1.0	0.862	1.00	0.777
7	0.057	1.2	0.809	1.44	0.720
8	0.050	1.4	0.753	1.96	0.664
9	0.043	1.6	0.694	2.56	0.608
10	0.037	1.8	0.634	3.24	0.554
11	0.030	2.0	0.574	4.00	0.501
12	0.024	2.2	0.515	4.84	0.450
13	0.017	2.4	0.457	5.76	0.402
14	0.012	2.6	0.404	6.76	0.356
15	0.007	2.8	0.355	7.84	0.310
16	0.003	3.0	0.310	9.00	0.268
17	0.000	3.2	0.272	10.24	0.229
		3.4	0.238	11.56	0.194
		3.6	0.209	12.96	0.164
		3.8	0.185	14.44	0.134
		4.0	0.165	16.00	0.101
		4.2	0.146	17.64	0.069
		4.4	0.127	19.36	0.050
		4.6	0.101	21.16	0.042
		4.8	0.077	23.04	0.034
		5.0	0.052	25.00	0.028
		5.2	0.029	27.04	0.024
		5.4	0.007	29.16	0.020
		5.6	-0.012	31.36	0.015
		5.8	-0.028	33.64	0.010
		6.0	-0.043	36.00	0.003

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq. km.}$

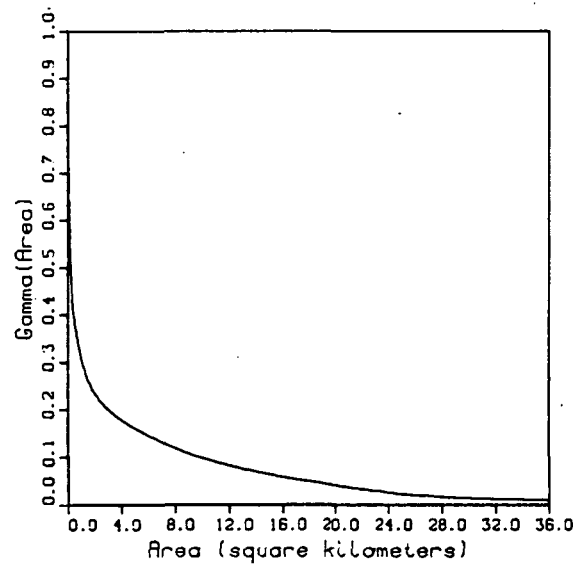
Storm Day
 July 20, 1977



Spatial Correlation



Variance Function



Storm Day July 20 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.815$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.185$

Expected Value of Point Depth (mm.): $E(Y) = 0.054$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.031$

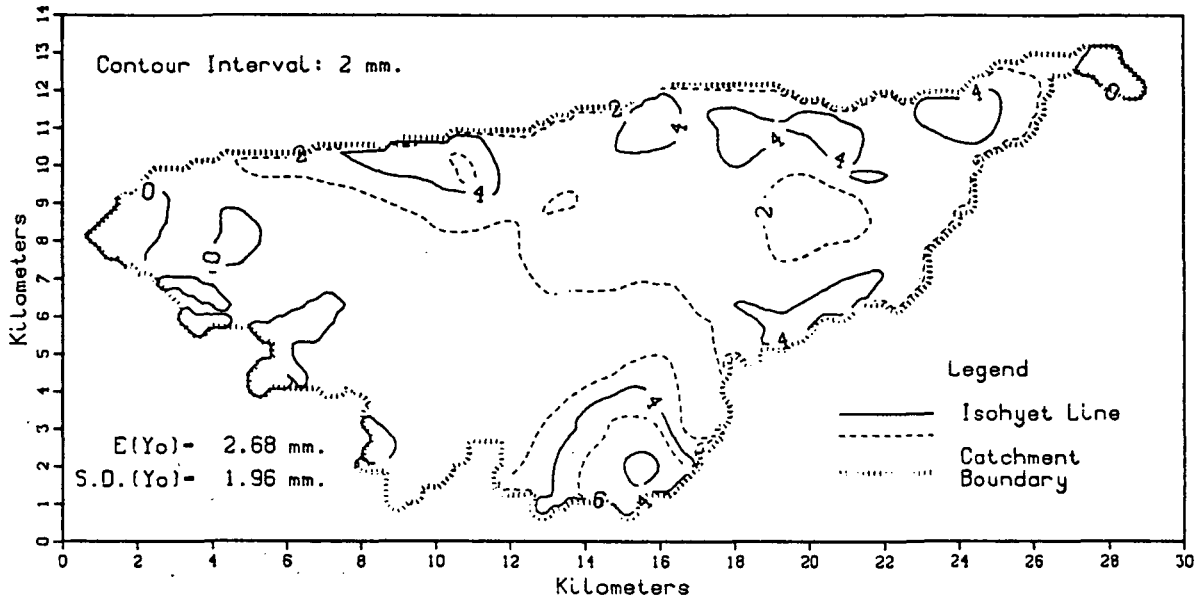
Coef. of Skewness of Point Depth: $S.C.(Y) = 4.310$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.006	0.0	1.000	0.00	1.000
2	0.000	0.2	0.983	0.04	0.766
		0.4	0.926	0.16	0.547
		0.6	0.830	0.36	0.421
		0.8	0.709	0.64	0.358
		1.0	0.578	1.00	0.306
		1.2	0.477	1.44	0.264
		1.4	0.402	1.96	0.234
		1.6	0.342	2.56	0.212
		1.8	0.296	3.24	0.193
		2.0	0.261	4.00	0.177
		2.2	0.236	4.84	0.162
		2.4	0.213	5.76	0.148
		2.6	0.188	6.76	0.134
		2.8	0.165	7.84	0.120
		3.0	0.140	9.00	0.107
		3.2	0.112	10.24	0.095
		3.4	0.082	11.56	0.084
		3.6	0.053	12.96	0.075
		3.8	0.024	14.44	0.066
		4.0	0.002	16.00	0.057
		4.2	-0.022	17.64	0.049
		4.4	-0.043	19.36	0.042
		4.6	-0.056	21.16	0.035
		4.8	-0.061	23.04	0.028
		5.0	-0.062	25.00	0.021
		5.2	-0.060	27.04	0.017
		5.4	-0.056	29.16	0.014
		5.6	-0.049	31.36	0.012
		5.8	-0.042	33.64	0.010
		6.0	-0.033	36.00	0.009

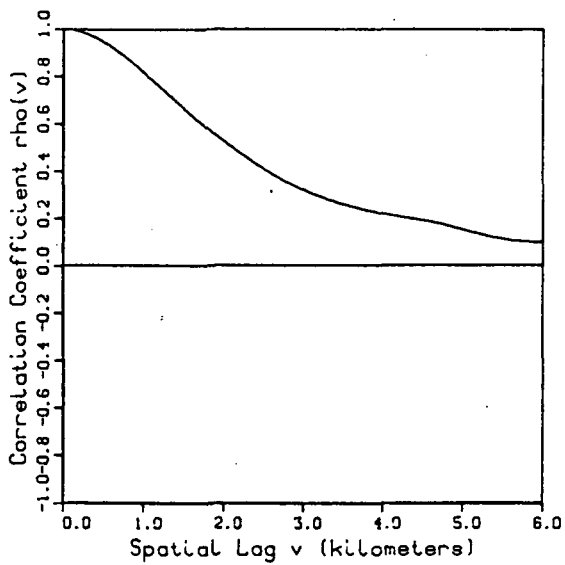
C-5

Walnut Gulch, Arizona
Ac=154.21 sq.km.

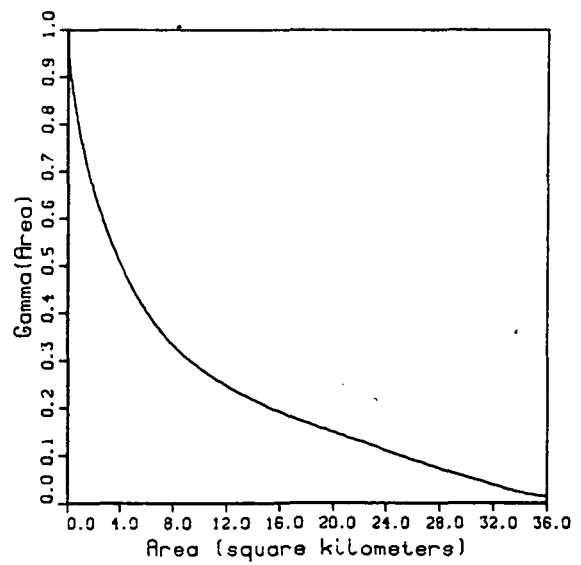
Storm Day
July 21, 1977



Spatial Correlation



Variance Function



Storm Day July 21 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.041$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.959$

Expected Value of Point Depth (mm.): $E(Y) = 2.245$

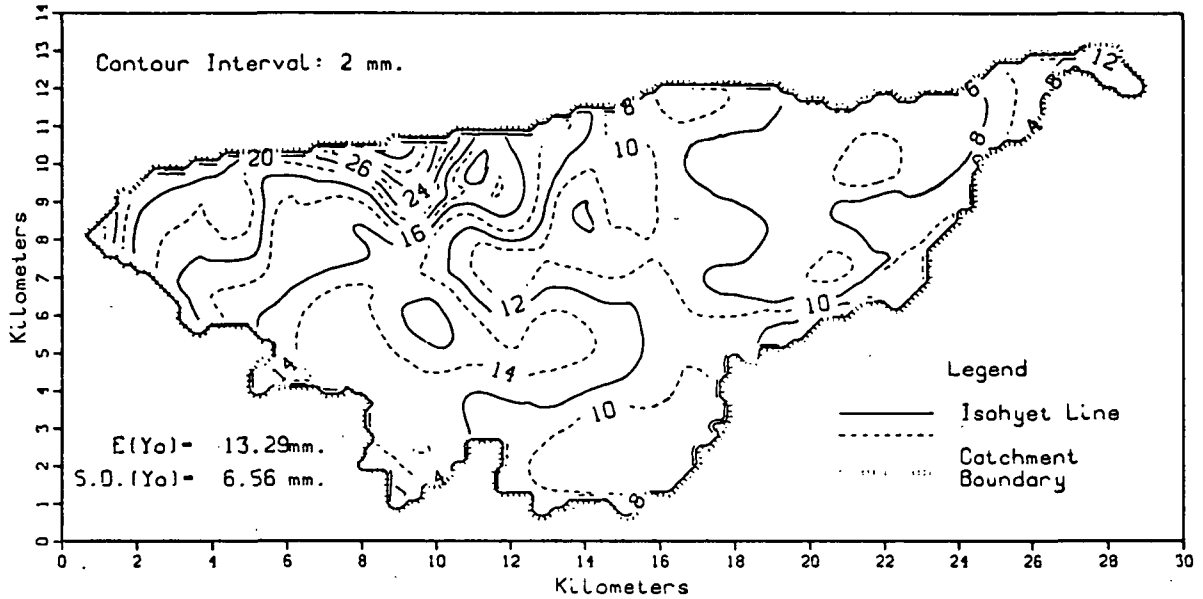
Variance of Point Depth (mm. sq.): $Var(Y) = 3.028$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.730$

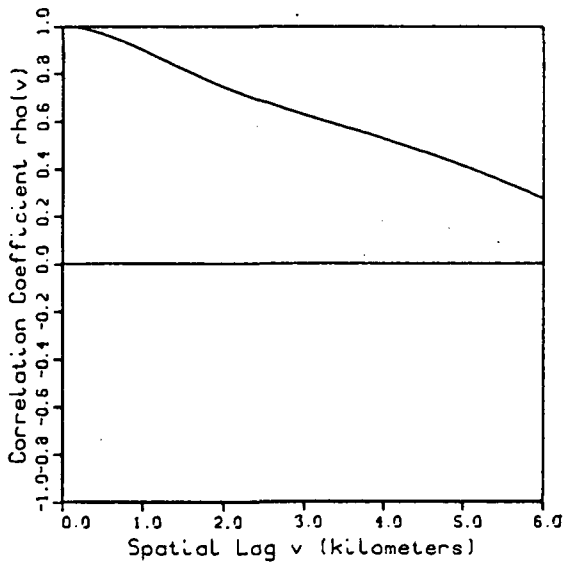
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.677	0.0	1.000	0.00	1.000
2	0.526	0.2	0.990	0.04	0.968
3	0.325	0.4	0.962	0.16	0.926
4	0.143	0.6	0.922	0.36	0.880
5	0.057	0.8	0.871	0.64	0.830
6	0.031	1.0	0.814	1.00	0.775
7	0.017	1.2	0.753	1.44	0.718
8	0.004	1.4	0.691	1.96	0.661
9	0.000	1.6	0.632	2.56	0.606
		1.8	0.575	3.24	0.553
		2.0	0.523	4.00	0.503
		2.2	0.474	4.84	0.455
		2.4	0.427	5.76	0.411
		2.6	0.385	6.76	0.371
		2.8	0.349	7.84	0.335
		3.0	0.318	9.00	0.304
		3.2	0.291	10.24	0.277
		3.4	0.268	11.56	0.253
		3.6	0.249	12.96	0.231
		3.8	0.232	14.44	0.210
		4.0	0.218	16.00	0.190
		4.2	0.206	17.64	0.171
		4.4	0.195	19.36	0.154
		4.6	0.183	21.16	0.138
		4.8	0.167	23.04	0.120
		5.0	0.150	25.00	0.099
		5.2	0.133	27.04	0.081
		5.4	0.117	29.16	0.061
		5.6	0.106	31.36	0.043
		5.8	0.100	33.64	0.024
		6.0	0.100	36.00	0.014

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq. km.}$

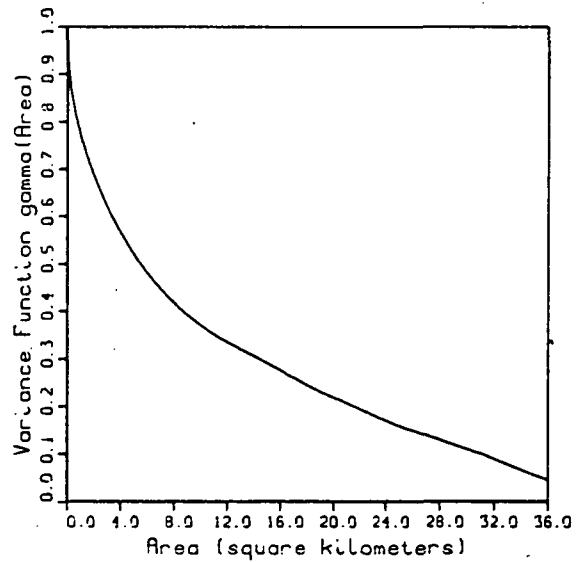
Storm Day
 July 22, 1977



Spatial Correlation



Variance Function



Storm Day July 22 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 12.713$

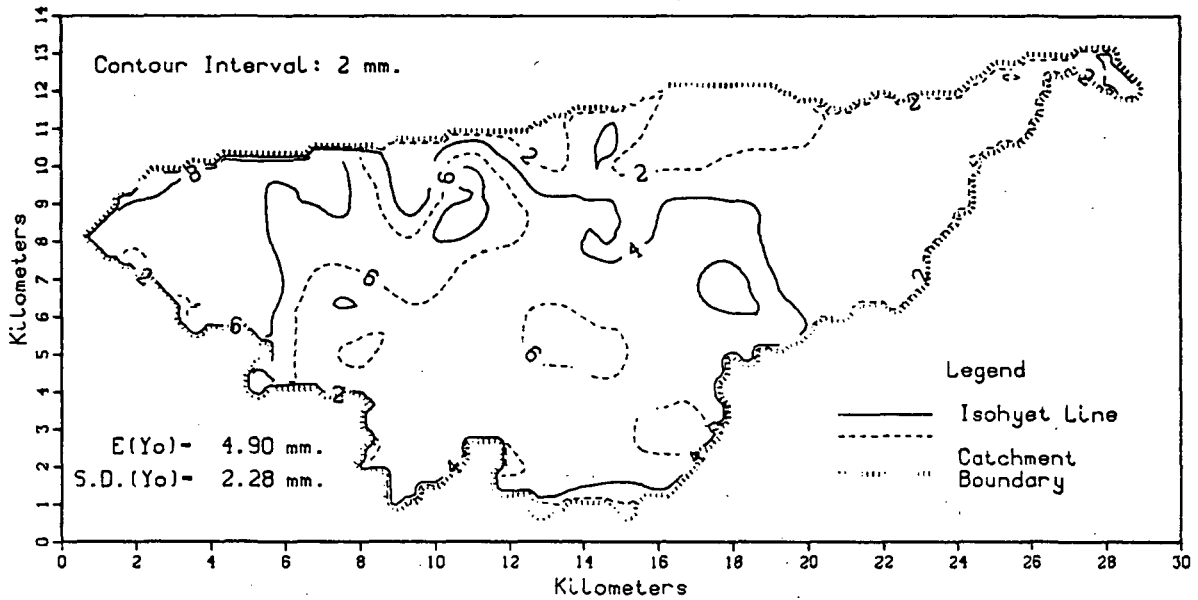
Variance of Point Depth (mm. sq.): $Var(Y) = 26.445$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.197$

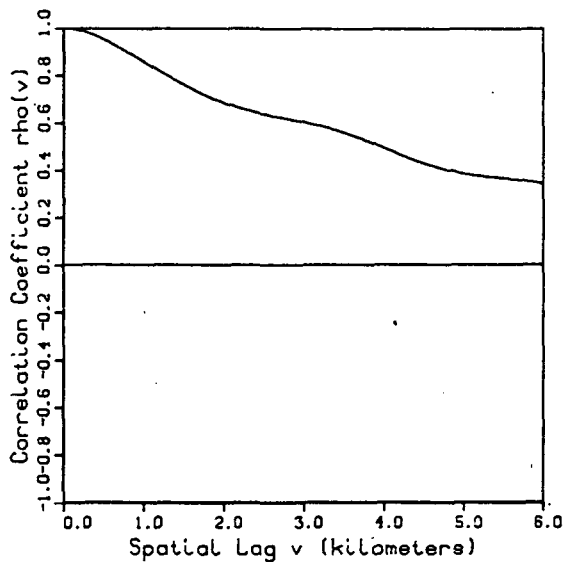
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y>y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.994	0.04	0.948
3	1.000	0.4	0.978	0.16	0.901
4	1.000	0.6	0.955	0.36	0.856
5	0.999	0.8	0.927	0.64	0.814
6	0.983	1.0	0.896	1.00	0.772
7	0.929	1.2	0.864	1.44	0.731
8	0.842	1.4	0.832	1.96	0.690
9	0.750	1.6	0.799	2.56	0.648
10	0.621	1.8	0.769	3.24	0.605
11	0.519	2.0	0.740	4.00	0.565
12	0.457	2.2	0.714	4.84	0.526
13	0.388	2.4	0.690	5.76	0.488
14	0.313	2.6	0.668	6.76	0.454
15	0.249	2.8	0.646	7.84	0.420
16	0.211	3.0	0.625	9.00	0.390
17	0.174	3.2	0.604	10.24	0.364
18	0.140	3.4	0.584	11.56	0.340
19	0.121	3.6	0.565	12.96	0.319
20	0.106	3.8	0.545	14.44	0.298
21	0.089	4.0	0.523	16.00	0.274
22	0.073	4.2	0.502	17.64	0.249
23	0.053	4.4	0.480	19.36	0.225
24	0.037	4.6	0.458	21.16	0.204
25	0.028	4.8	0.434	23.04	0.181
26	0.021	5.0	0.410	25.00	0.157
27	0.016	5.2	0.384	27.04	0.138
28	0.012	5.4	0.358	29.16	0.117
29	0.009	5.6	0.331	31.36	0.096
30	0.006	5.8	0.302	33.64	0.070
31	0.004	6.0	0.274	36.00	0.045
32	0.002				
33	0.001				
34	0.000				

Walnut Gulch, Arizona
 $A_c = 154.21$ sq.km.

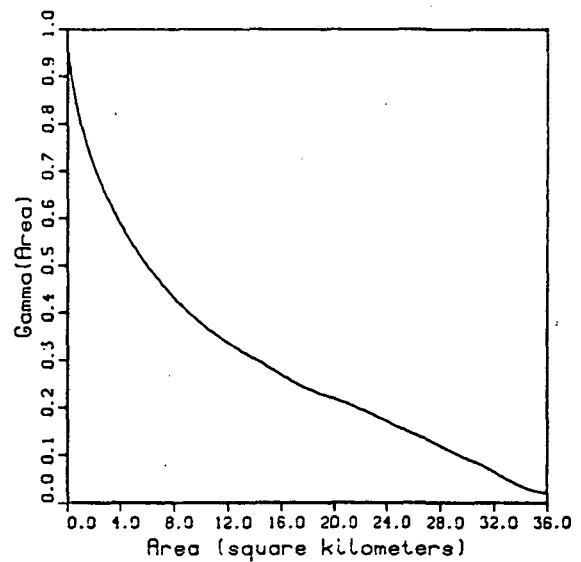
Storm Day
 July 23, 1977



Spatial Correlation



Variance Function



Storm Day July 23 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 5.068$

Variance of Point Depth (mm. sq.): $Var(Y) = 4.036$

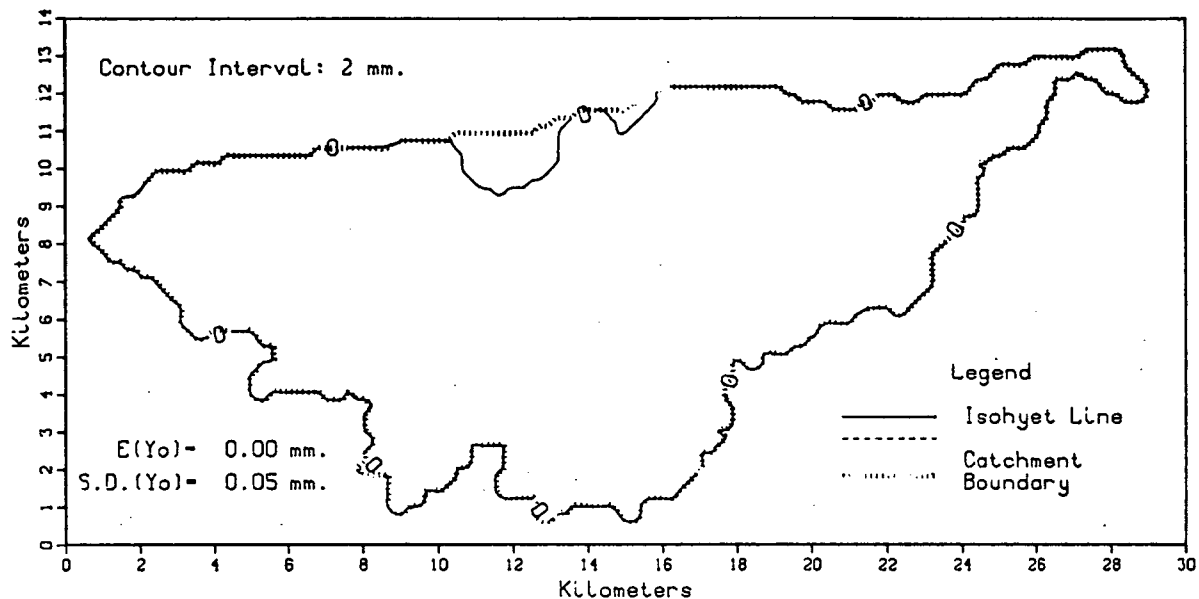
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.366$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
2	0.940	0.2	0.991	0.04	0.965
3	0.861	0.4	0.967	0.16	0.926
4	0.664	0.6	0.934	0.36	0.887
5	0.517	0.8	0.895	0.64	0.844
6	0.259	1.0	0.855	1.00	0.800
7	0.168	1.2	0.815	1.44	0.755
8	0.117	1.4	0.777	1.96	0.712
9	0.038	1.6	0.741	2.56	0.669
10	0.003	1.8	0.710	3.24	0.626
11	0.000	2.0	0.683	4.00	0.585
		2.2	0.661	4.84	0.544
		2.4	0.644	5.76	0.506
		2.6	0.629	6.76	0.469
		2.8	0.616	7.84	0.433
		3.0	0.602	9.00	0.400
		3.2	0.587	10.24	0.370
		3.4	0.568	11.56	0.343
		3.6	0.546	12.96	0.318
		3.8	0.520	14.44	0.294
		4.0	0.492	16.00	0.268
		4.2	0.464	17.64	0.243
		4.4	0.438	19.36	0.224
		4.6	0.417	21.16	0.206
		4.8	0.398	23.04	0.184
		5.0	0.384	25.00	0.156
		5.2	0.374	27.04	0.131
		5.4	0.366	29.16	0.102
		5.6	0.360	31.36	0.075
		5.8	0.352	33.64	0.039
		6.0	0.342	36.00	0.021

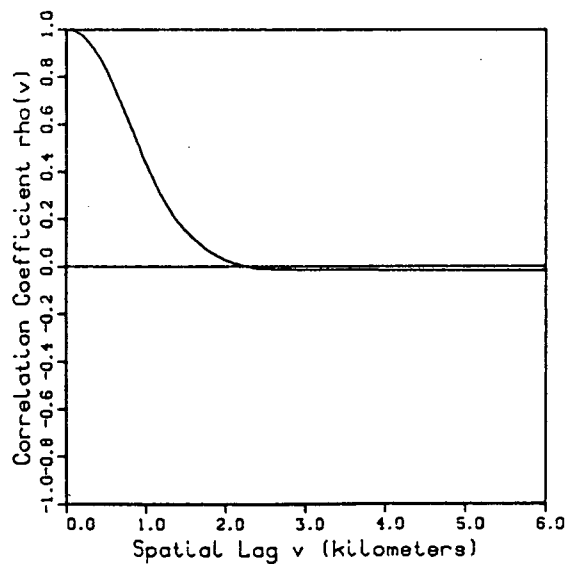
Walnut Gulch, Arizona

Ac=154.21 sq.km.

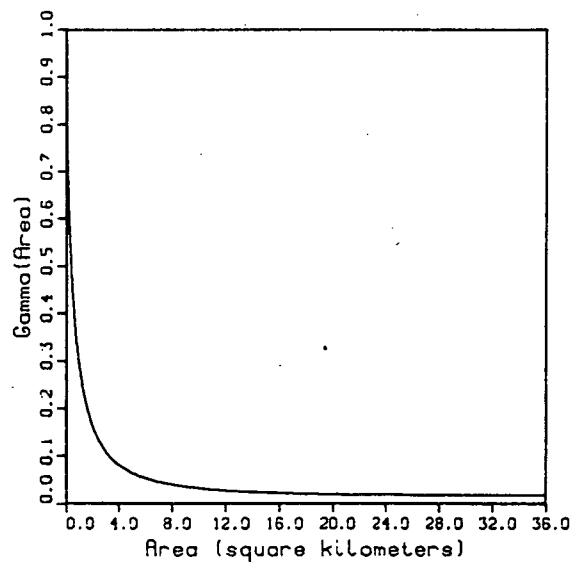
Storm Day
July 24, 1977



Spatial Correlation



Variance Function



Storm Day July 24 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.971$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.029$

Expected Value of Point Depth (mm.): $E(Y) = 0.003$

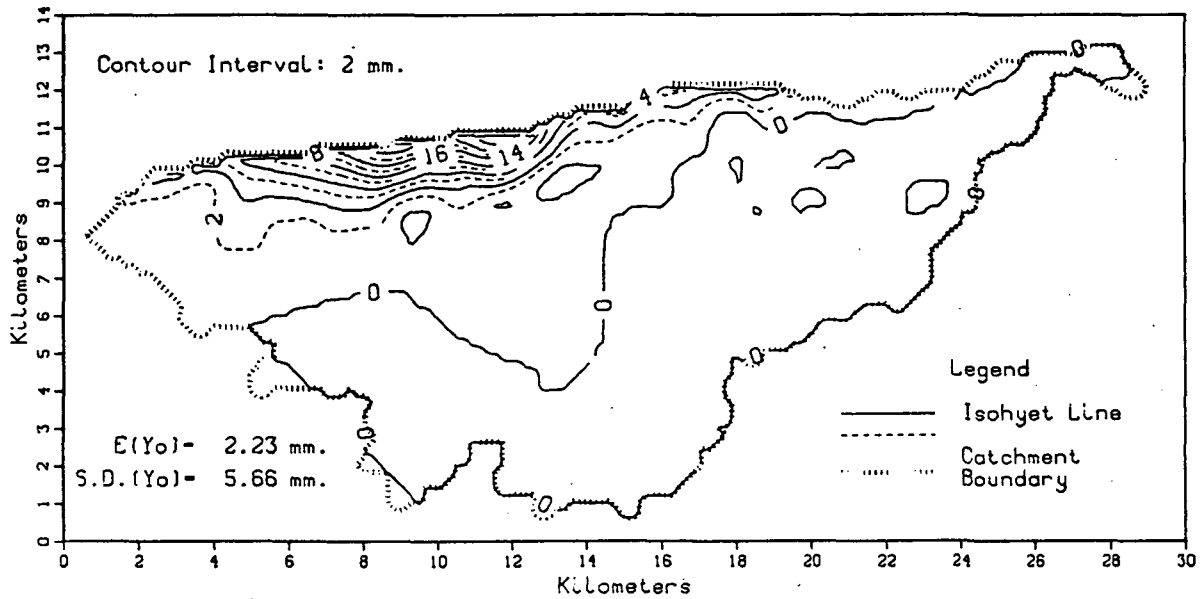
Variance of Point Depth (mm. sq.): $Var(Y) = 0.001$

Coef. of Skewness of Point Depth: $S.C.(Y) = 10.227$

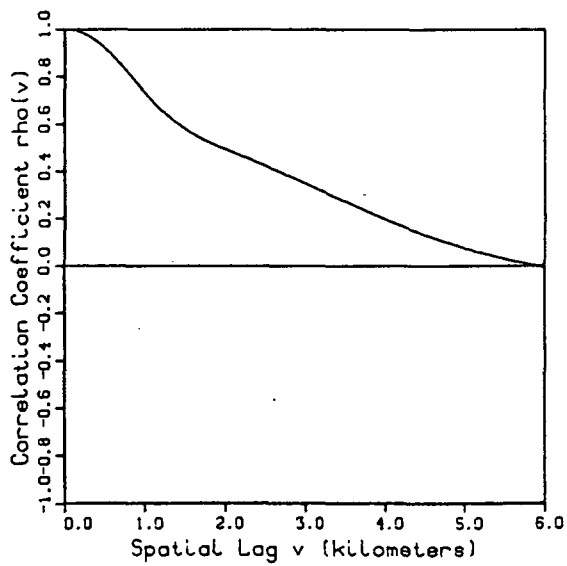
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.972	0.04	0.820
		0.4	0.886	0.16	0.655
		0.6	0.750	0.36	0.508
		0.8	0.589	0.64	0.386
		1.0	0.429	1.00	0.289
		1.2	0.291	1.44	0.216
		1.4	0.186	1.96	0.163
		1.6	0.115	2.56	0.126
		1.8	0.061	3.24	0.099
		2.0	0.025	4.00	0.079
		2.2	0.002	4.84	0.065
		2.4	-.010	5.76	0.054
		2.6	-.014	6.76	0.045
		2.8	-.015	7.84	0.039
		3.0	-.015	9.00	0.034
		3.2	-.016	10.24	0.030
		3.4	-.016	11.56	0.027
		3.6	-.016	12.96	0.024
		3.8	-.017	14.44	0.022
		4.0	-.017	16.00	0.021
		4.2	-.017	17.64	0.019
		4.4	-.018	19.36	0.018
		4.6	-.018	21.16	0.018
		4.8	-.018	23.04	0.017
		5.0	-.019	25.00	0.017
		5.2	-.019	27.04	0.016
		5.4	-.019	29.16	0.016
		5.6	-.020	31.36	0.016
		5.8	-.020	33.64	0.016
		6.0	-.021	36.00	0.016

Walnut Gulch, Arizona
Ac=154.21 sq.km.

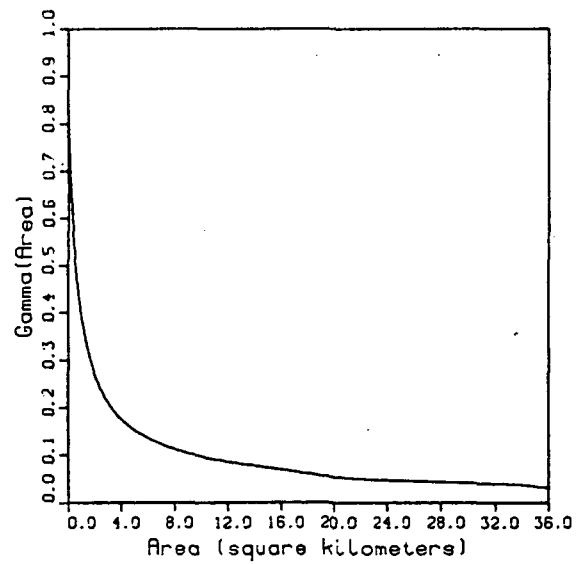
Storm Day
July 25, 1977



Spatial Correlation



Variance Function



Storm Day July 25 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.526$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.474$

Expected Value of Point Depth (mm.): $E(Y) = 1.176$

Variance of Point Depth (mm. sq.): $Var(Y) = 10.192$

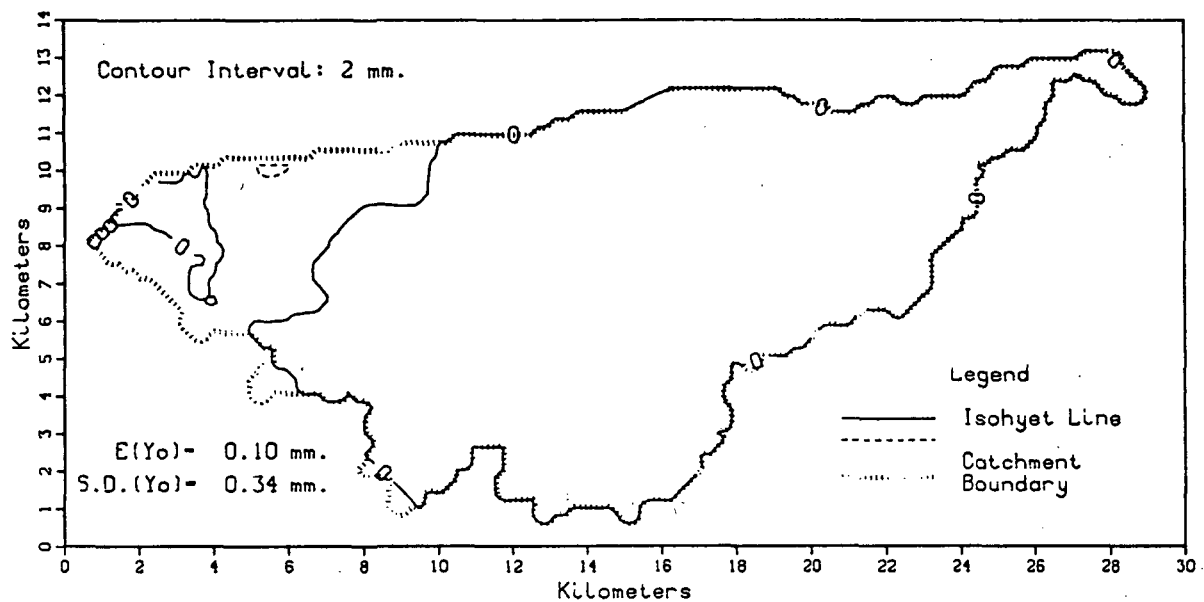
Coef. of Skewness of Point Depth: $S.C.(Y) = 4.290$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.215	0.0	1.000	0.00	1.000
2	0.132	0.2	0.987	0.04	0.846
3	0.101	0.4	0.947	0.16	0.709
4	0.081	0.6	0.884	0.36	0.586
5	0.066	0.8	0.807	0.64	0.481
6	0.054	1.0	0.729	1.00	0.395
7	0.047	1.2	0.658	1.44	0.327
8	0.041	1.4	0.600	1.96	0.273
9	0.036	1.6	0.554	2.56	0.231
10	0.032	1.8	0.519	3.24	0.199
11	0.027	2.0	0.490	4.00	0.174
12	0.024	2.2	0.462	4.84	0.154
13	0.021	2.4	0.434	5.76	0.138
14	0.018	2.6	0.405	6.76	0.124
15	0.015	2.8	0.376	7.84	0.113
16	0.013	3.0	0.346	9.00	0.103
17	0.011	3.2	0.315	10.24	0.094
18	0.009	3.4	0.285	11.56	0.087
19	0.007	3.6	0.254	12.96	0.080
20	0.005	3.8	0.224	14.44	0.074
21	0.003	4.0	0.195	16.00	0.068
22	0.003	4.2	0.168	17.64	0.061
23	0.002	4.4	0.142	19.36	0.054
24	0.001	4.6	0.118	21.16	0.050
25	0.001	4.8	0.095	23.04	0.047
26	0.001	5.0	0.073	25.00	0.045
27	0.000	5.2	0.053	27.04	0.043
28	0.000	5.4	0.035	29.16	0.041
29	0.000	5.6	0.020	31.36	0.039
		5.8	0.006	33.64	0.036
		6.0	-.006	36.00	0.028

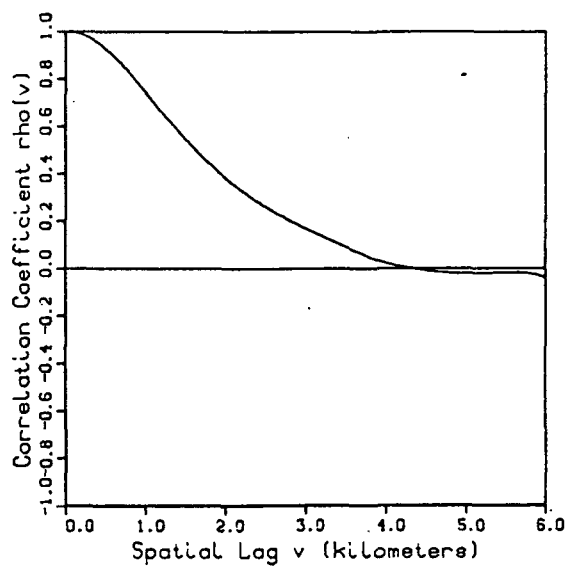
Walnut Gulch, Arizona

Ac=154.21 sq.km.

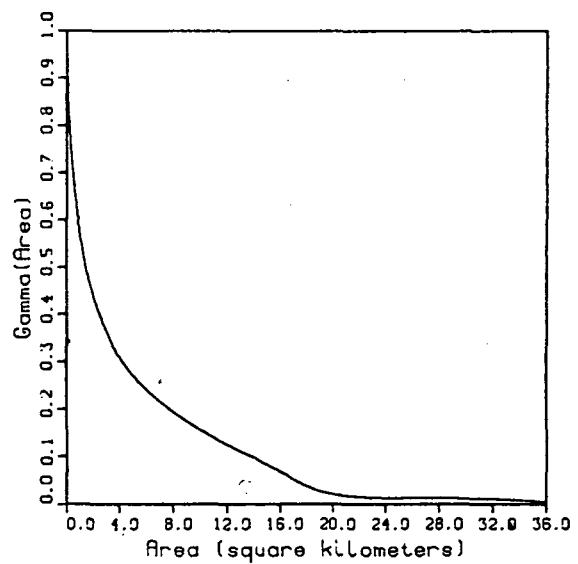
Storm Day
July 27, 1977



Spatial Correlation



Variance Function



Storm Day July 27 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.855$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.145$

Expected Value of Point Depth (mm.): $E(Y) = 0.065$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.062$

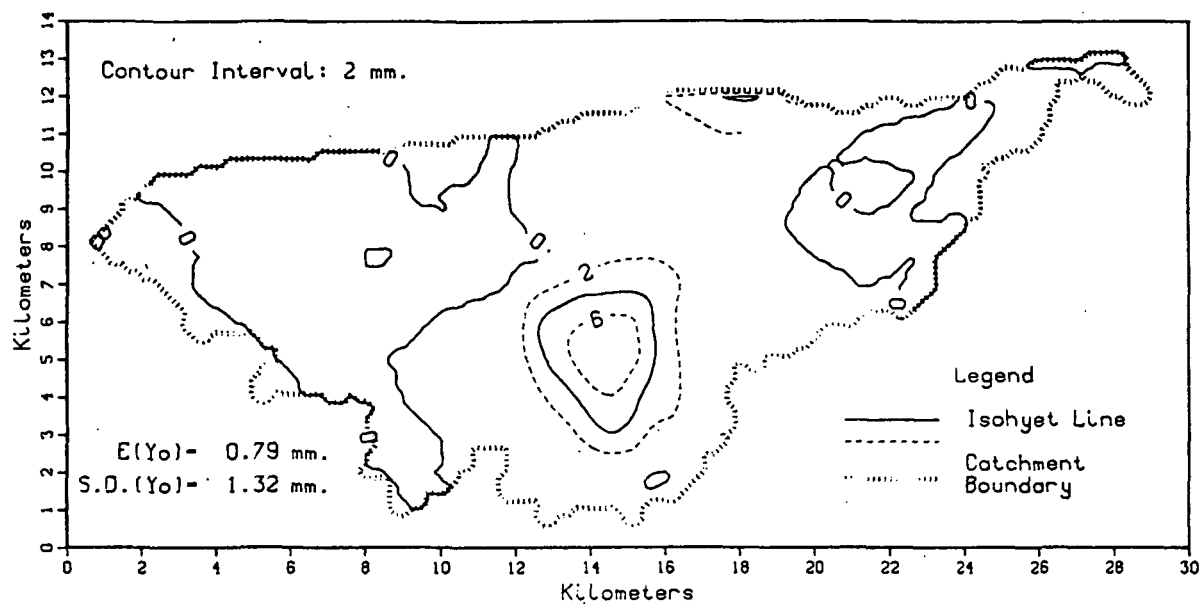
Coef. of Skewness of Point Depth: $S.C.(Y) = 5.157$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.022	0.0	1.000	0.00	1.000
2	0.002	0.2	0.987	0.04	0.920
3	0.000	0.4	0.951	0.16	0.831
		0.6	0.894	0.36	0.740
		0.8	0.820	0.64	0.650
		1.0	0.739	1.00	0.570
		1.2	0.657	1.44	0.502
		1.4	0.579	1.96	0.442
		1.6	0.507	2.56	0.391
		1.8	0.440	3.24	0.346
		2.0	0.379	4.00	0.307
		2.2	0.326	4.84	0.274
		2.4	0.279	5.76	0.245
		2.6	0.238	6.76	0.219
		2.8	0.201	7.84	0.196
		3.0	0.168	9.00	0.173
		3.2	0.136	10.24	0.150
		3.4	0.105	11.56	0.130
		3.6	0.074	12.96	0.110
		3.8	0.045	14.44	0.090
		4.0	0.021	16.00	0.067
		4.2	0.005	17.64	0.041
		4.4	-.007	19.36	0.023
		4.6	-.016	21.16	0.017
		4.8	-.022	23.04	0.012
		5.0	-.024	25.00	0.012
		5.2	-.023	27.04	0.012
		5.4	-.020	29.16	0.011
		5.6	-.019	31.36	0.010
		5.8	-.025	33.64	0.007
		6.0	-.042	36.00	0.002

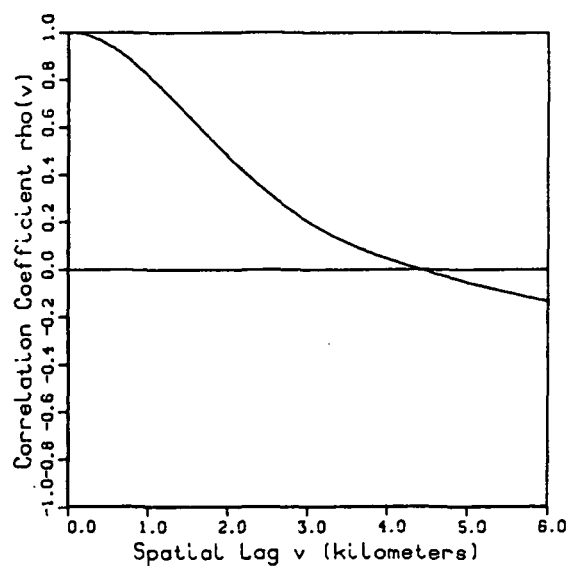
Walnut Gulch, Arizona

Ac-154.21 sq.km.

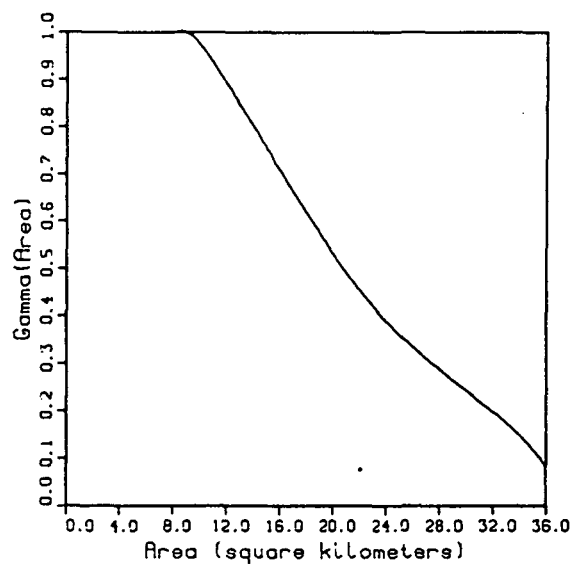
Storm Day
July 28, 1977



Spatial Correlation



Variance Function



Storm Day July 28 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.325$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.675$

Expected Value of Point Depth (mm.): $E(Y) = 0.837$

Variance of Point Depth (mm. sq.): $Var(Y) = 1.923$

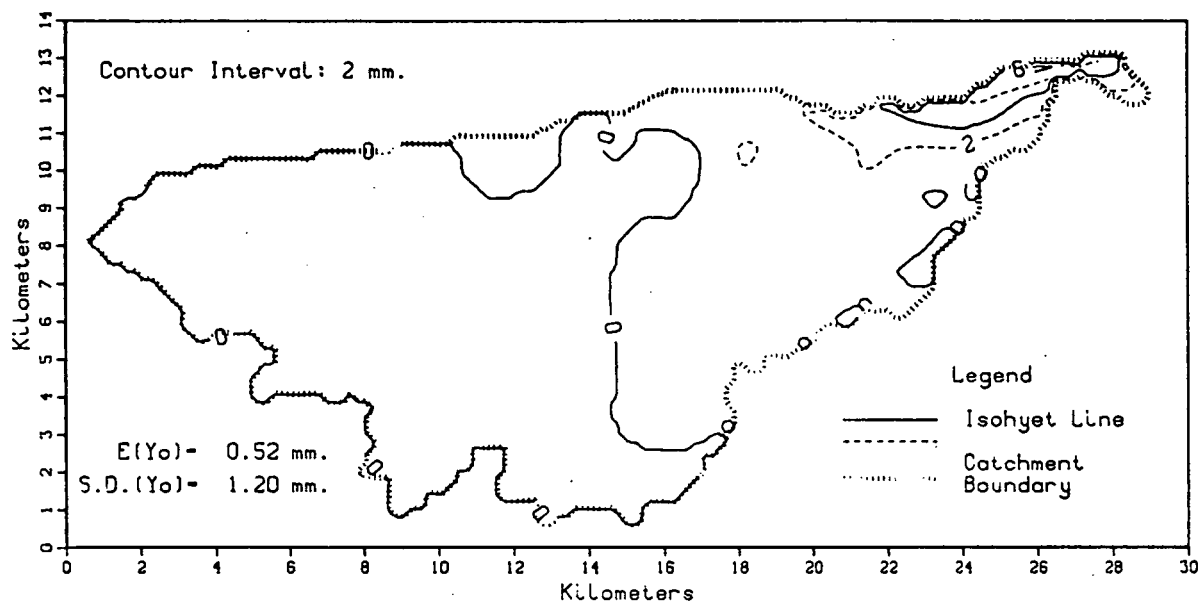
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.581$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km. sq.) Gamma (A)	
1	0.272	0.0	1.000	0.00	1.000
2	0.121	0.2	0.991	0.04	1.029
3	0.080	0.4	0.964	0.16	1.057
4	0.054	0.6	0.924	0.36	1.078
5	0.033	0.8	0.873	0.64	1.094
6	0.019	1.0	0.813	1.00	1.107
7	0.008	1.2	0.748	1.44	1.117
8	0.000	1.4	0.679	1.96	1.123
		1.6	0.610	2.56	1.125
		1.8	0.541	3.24	1.124
		2.0	0.474	4.00	1.120
		2.2	0.410	4.84	1.112
		2.4	0.350	5.76	1.098
		2.6	0.295	6.76	1.077
		2.8	0.244	7.84	1.048
		3.0	0.199	9.00	1.010
		3.2	0.160	10.24	0.963
		3.4	0.125	11.56	0.908
		3.6	0.094	12.96	0.846
		3.8	0.067	14.44	0.779
		4.0	0.042	16.00	0.707
		4.2	0.019	17.64	0.631
		4.4	-.002	19.36	0.556
		4.6	-.021	21.16	0.485
		4.8	-.040	23.04	0.418
		5.0	-.058	25.00	0.359
		5.2	-.076	27.04	0.308
		5.4	-.093	29.16	0.259
		5.6	-.109	31.36	0.211
		5.8	-.125	33.64	0.157
		6.0	-.139	36.00	0.082

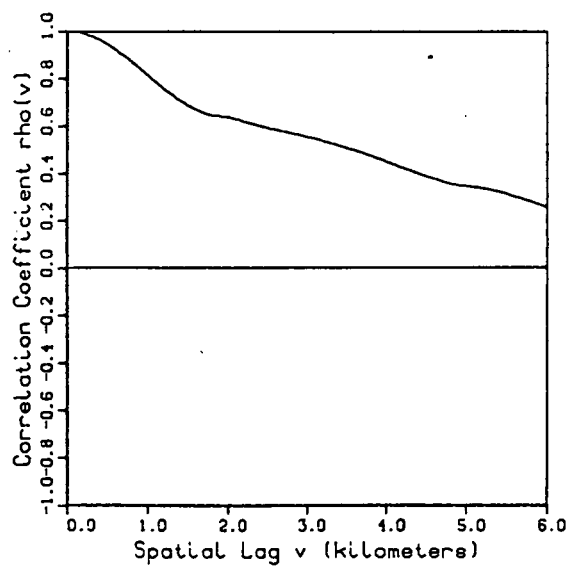
Walnut Gulch, Arizona

Ac=154.21 sq.km.

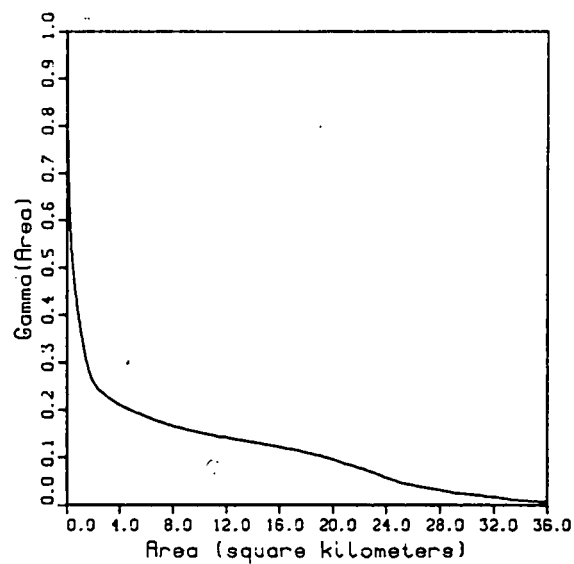
Storm Day
July 30, 1977



Spatial Correlation



Variance Function



Storm Day July 30 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.574$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.426$

Expected Value of Point Depth (mm.): $E(Y) = 0.498$

Variance of Point Depth (mm. sq.): $Var(Y) = 1.132$

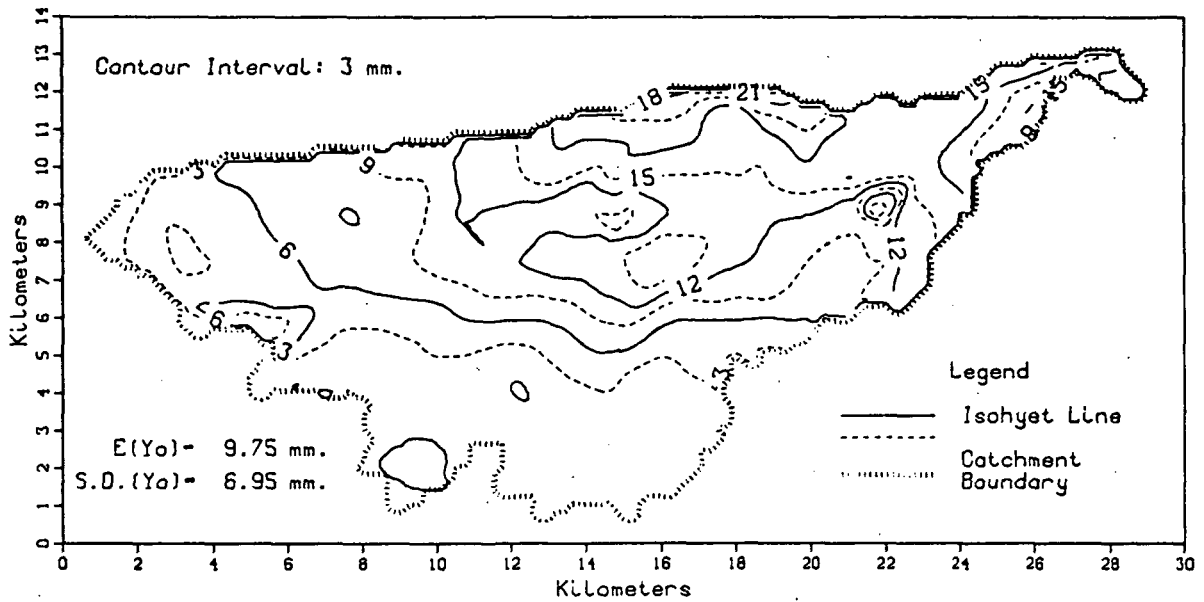
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.600$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.180	0.0	1.000	0.00	1.000
2	0.052	0.2	0.990	0.04	0.822
3	0.032	0.4	0.963	0.16	0.654
4	0.021	0.6	0.920	0.36	0.529
5	0.013	0.8	0.868	0.64	0.445
6	0.007	1.0	0.811	1.00	0.373
7	0.003	1.2	0.754	1.44	0.305
8	0.001	1.4	0.704	1.96	0.259
9	0.000	1.6	0.666	2.56	0.237
		1.8	0.642	3.24	0.223
		2.0	0.634	4.00	0.210
		2.2	0.614	4.84	0.198
		2.4	0.597	5.76	0.187
		2.6	0.581	6.76	0.176
		2.8	0.566	7.84	0.166
		3.0	0.552	9.00	0.157
		3.2	0.534	10.24	0.150
		3.4	0.514	11.56	0.142
		3.6	0.494	12.96	0.135
		3.8	0.472	14.44	0.128
		4.0	0.447	16.00	0.120
		4.2	0.421	17.64	0.111
		4.4	0.397	19.36	0.099
		4.6	0.374	21.16	0.084
		4.8	0.354	23.04	0.067
		5.0	0.344	25.00	0.046
		5.2	0.333	27.04	0.035
		5.4	0.320	29.16	0.024
		5.6	0.300	31.36	0.018
		5.8	0.278	33.64	0.010
		6.0	0.256	36.00	0.006

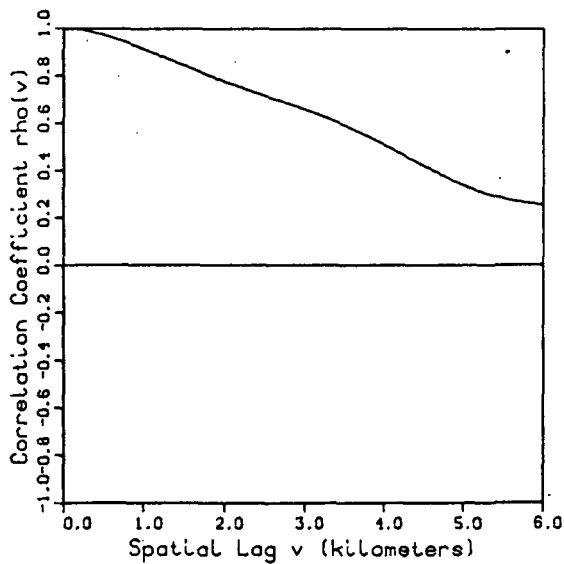
Walnut Gulch, Arizona

Ac=154.21 sq.km.

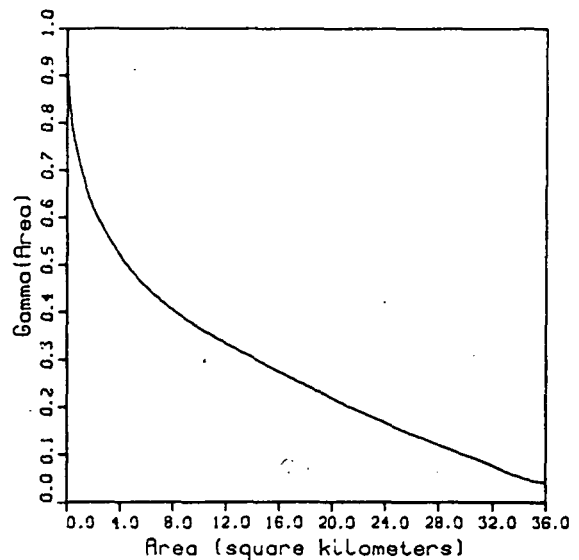
Storm Day
July 31, 1977



Spatial Correlation



Variance Function



Storm Day July 31 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.009$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.991$

Expected Value of Point Depth (mm.): $E(Y) = 8.881$

Variance of Point Depth (mm. sq.): $Var(Y) = 39.312$

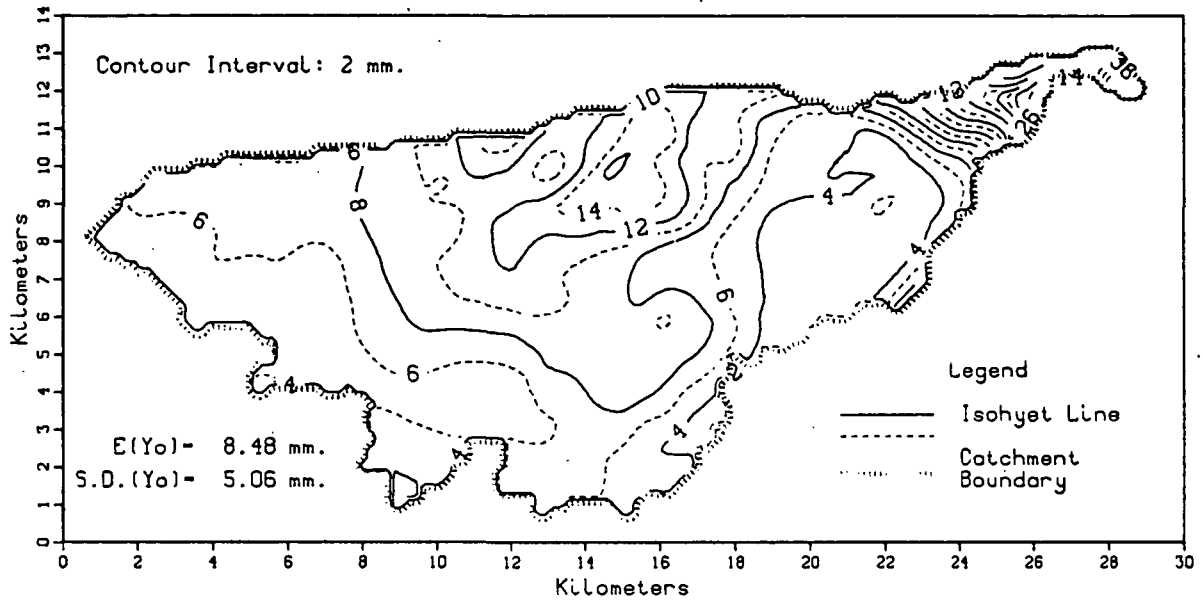
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.456$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.919	0.0	1.000	0.00	1.000
2	0.834	0.2	0.995	0.04	0.930
3	0.783	0.4	0.981	0.16	0.863
4	0.722	0.6	0.961	0.36	0.806
5	0.672	0.8	0.937	0.64	0.759
6	0.623	1.0	0.911	1.00	0.713
7	0.556	1.2	0.884	1.44	0.666
8	0.500	1.4	0.856	1.96	0.624
9	0.459	1.6	0.828	2.56	0.588
10	0.413	1.8	0.801	3.24	0.553
11	0.365	2.0	0.774	4.00	0.519
12	0.320	2.2	0.749	4.84	0.487
13	0.275	2.4	0.725	5.76	0.457
14	0.227	2.6	0.702	6.76	0.431
15	0.200	2.8	0.680	7.84	0.406
16	0.164	3.0	0.656	9.00	0.383
17	0.109	3.2	0.631	10.24	0.361
18	0.075	3.4	0.604	11.56	0.340
19	0.056	3.6	0.574	12.96	0.318
20	0.043	3.8	0.543	14.44	0.296
21	0.032	4.0	0.508	16.00	0.273
22	0.023	4.2	0.473	17.64	0.249
23	0.015	4.4	0.437	19.36	0.226
24	0.007	4.6	0.402	21.16	0.202
25	0.003	4.8	0.368	23.04	0.178
26	0.002	5.0	0.337	25.00	0.153
27	0.001	5.2	0.312	27.04	0.130
28	0.001	5.4	0.291	29.16	0.106
29	0.000	5.6	0.275	31.36	0.084
30	0.000	5.8	0.263	33.64	0.056
31	0.000	6.0	0.255	36.00	0.041

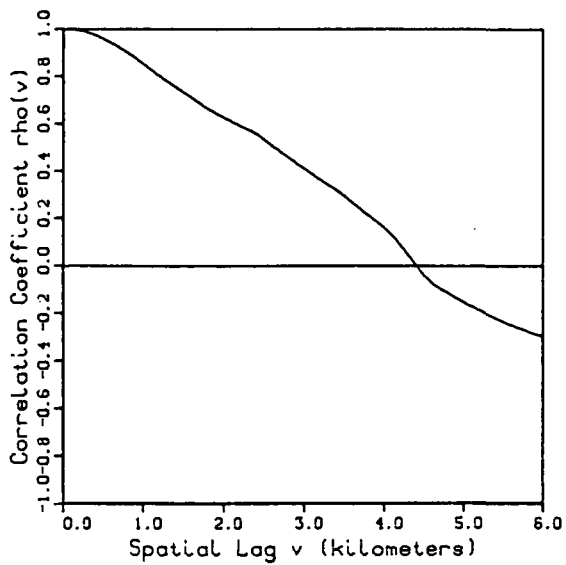
Walnut Gulch, Arizona

Ac=154.21 sq.km.

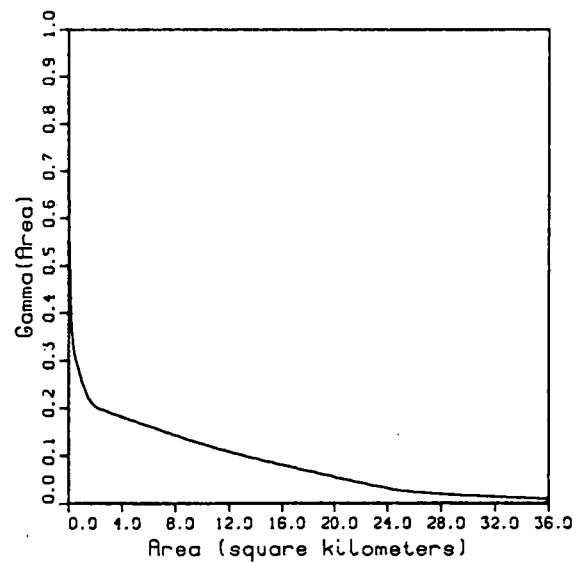
Storm Day
Aug 1, 1977



Spatial Correlation



Variance Function

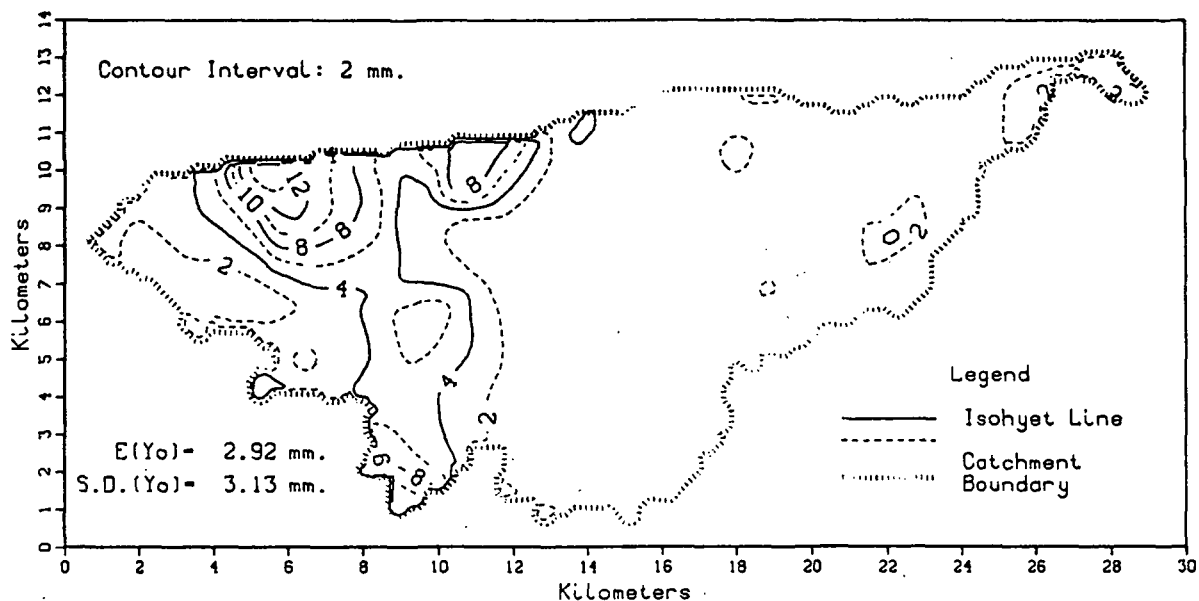


Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$ Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$ Expected Value of Point Depth (mm.): $E(Y)=8.409$ Variance of Point Depth (mm. sq.): $Var(Y)=40.985$ Coef. of Skewness of Point Depth: $S.C.(Y)=5.676$

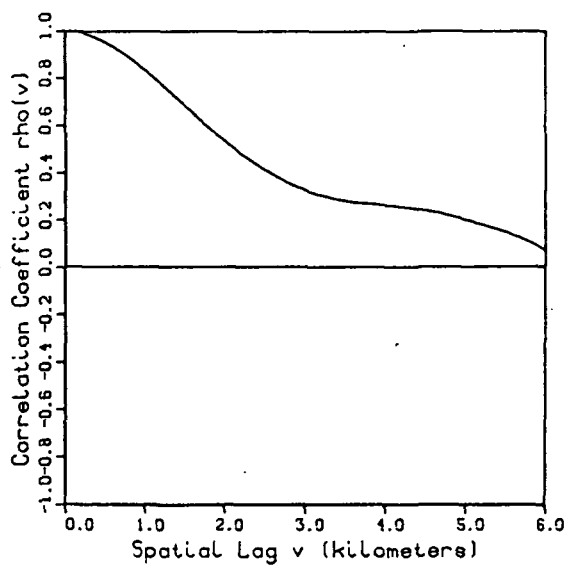
Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		Gamma (A)
1	1.000	0.0	1.000	0.00	1.000
4	0.893	0.2	0.992	0.04	0.711
7	0.515	0.4	0.972	0.16	0.447
10	0.234	0.6	0.938	0.36	0.330
13	0.093	0.8	0.897	0.64	0.292
16	0.033	1.0	0.848	1.00	0.257
19	0.026	1.2	0.798	1.44	0.223
22	0.021	1.4	0.751	1.96	0.203
25	0.017	1.6	0.705	2.56	0.195
28	0.013	1.8	0.659	3.24	0.188
31	0.011	2.0	0.623	4.00	0.181
34	0.009	2.2	0.588	4.84	0.172
37	0.007	2.4	0.555	5.76	0.163
40	0.006	2.6	0.502	6.76	0.154
43	0.005	2.8	0.454	7.84	0.143
46	0.005	3.0	0.406	9.00	0.132
49	0.005	3.2	0.359	10.24	0.121
52	0.004	3.4	0.315	11.56	0.111
55	0.003	3.6	0.263	12.96	0.100
58	0.003	3.8	0.208	14.44	0.090
61	0.003	4.0	0.156	16.00	0.079
64	0.002	4.2	0.083	17.64	0.069
67	0.002	4.4	-0.005	19.36	0.058
70	0.002	4.6	-0.077	21.16	0.047
73	0.001	4.8	-0.119	23.04	0.036
76	0.001	5.0	-0.157	25.00	0.025
79	0.001	5.2	-0.193	27.04	0.020
82	0.001	5.4	-0.225	29.16	0.016
85	0.000	5.6	-0.254	31.36	0.014
88	0.000	5.8	-0.280	33.64	0.011
91	0.000	6.0	-0.302	36.00	0.008

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

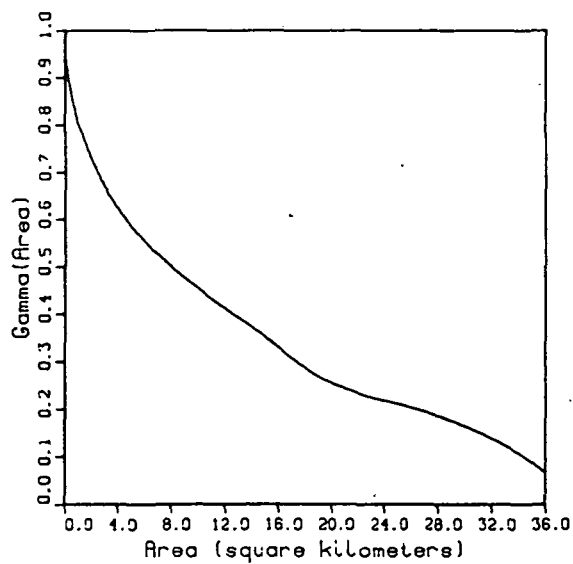
Storm Day
 Aug 6, 1977



Spatial Correlation



Variance Function



Storm Day Aug 6 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.001$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.999$

Expected Value of Point Depth (mm.): $E(Y) = 2.587$

Variance of Point Depth (mm. sq.): $Var(Y) = 6.839$

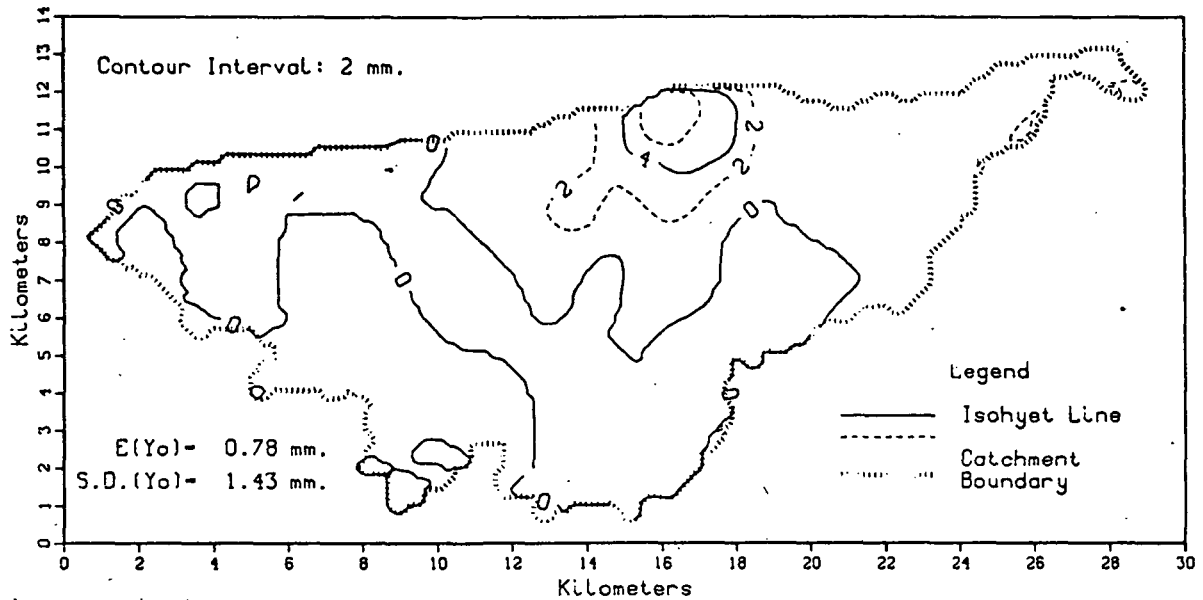
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.019$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho(v)		Variance Function A (km.sq.) Gamma(A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.744	0.0	1.000	0.00	1.000
2	0.372	0.2	0.991	0.04	0.963
3	0.270	0.4	0.967	0.16	0.924
4	0.205	0.6	0.931	0.36	0.886
5	0.151	0.8	0.884	0.64	0.845
6	0.104	1.0	0.831	1.00	0.807
7	0.073	1.2	0.772	1.44	0.769
8	0.056	1.4	0.711	1.96	0.730
9	0.039	1.6	0.649	2.56	0.692
10	0.026	1.8	0.588	3.24	0.656
11	0.019	2.0	0.531	4.00	0.621
12	0.013	2.2	0.478	4.84	0.589
13	0.008	2.4	0.431	5.76	0.559
14	0.004	2.6	0.389	6.76	0.530
15	0.000	2.8	0.354	7.84	0.502
16	0.000	3.0	0.325	9.00	0.474
		3.2	0.303	10.24	0.446
		3.4	0.286	11.56	0.419
		3.6	0.275	12.96	0.391
		3.8	0.267	14.44	0.362
		4.0	0.261	16.00	0.329
		4.2	0.253	17.64	0.292
		4.4	0.244	19.36	0.261
		4.6	0.232	21.16	0.242
		4.8	0.217	23.04	0.223
		5.0	0.199	25.00	0.210
		5.2	0.179	27.04	0.193
		5.4	0.157	29.16	0.172
		5.6	0.134	31.36	0.146
		5.8	0.105	33.64	0.112
		6.0	0.070	36.00	0.065

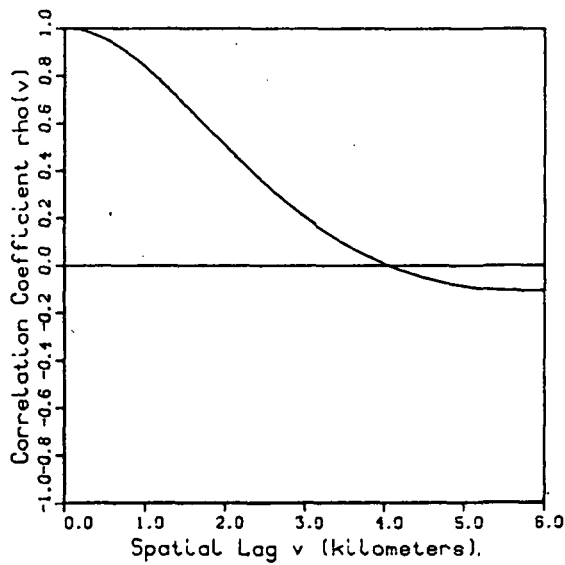
Walnut Gulch, Arizona

Ac=154.21 sq.km.

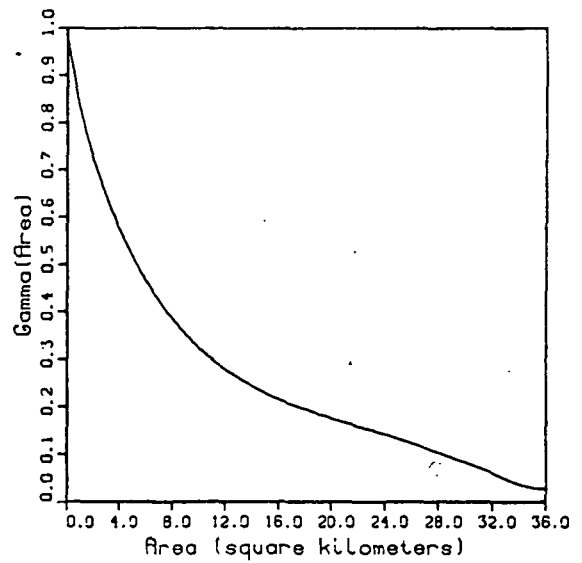
Storm Day
Aug 8, 1977



Spatial Correlation



Variance Function



Storm Day Aug 8 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.360$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.640$

Expected Value of Point Depth (mm.): $E(Y) = 0.617$

Variance of Point Depth (mm. sq.): $Var(Y) = 1.328$

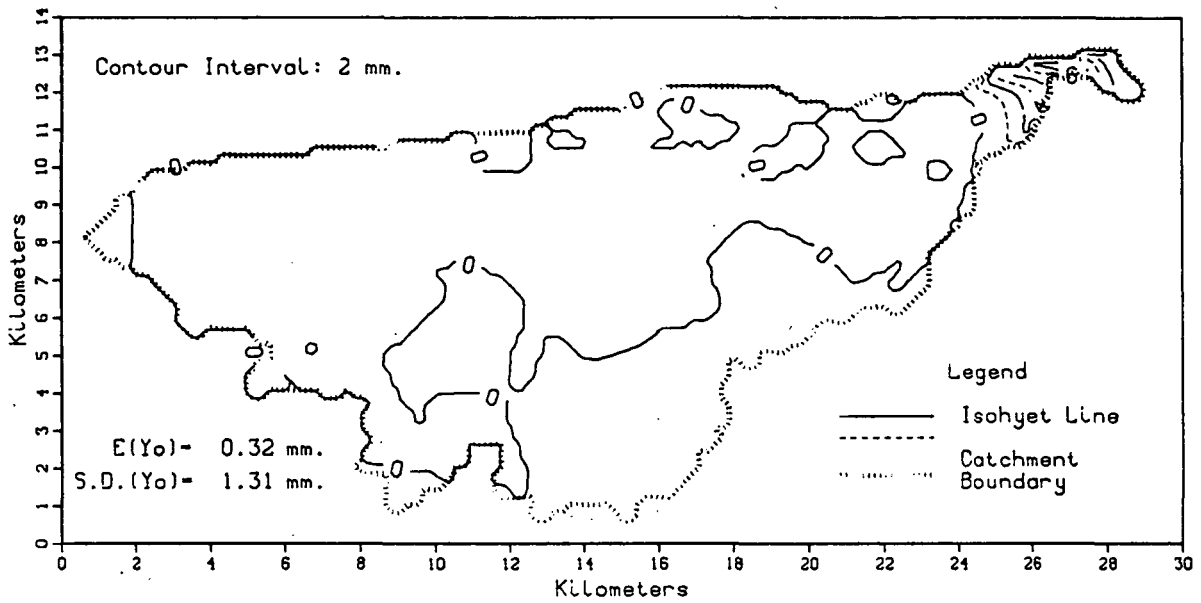
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.134$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.179	0.0	1.000	0.00	1.000
2	0.081	0.2	0.992	0.04	0.984
3	0.049	0.4	0.969	0.16	0.959
4	0.032	0.6	0.934	0.36	0.924
5	0.020	0.8	0.888	0.64	0.881
6	0.011	1.0	0.833	1.00	0.833
7	0.002	1.2	0.771	1.44	0.782
8	0.000	1.4	0.705	1.96	0.730
		1.6	0.637	2.56	0.677
		1.8	0.569	3.24	0.624
		2.0	0.502	4.00	0.572
		2.2	0.436	4.84	0.522
		2.4	0.372	5.76	0.474
		2.6	0.311	6.76	0.430
		2.8	0.255	7.84	0.388
		3.0	0.202	9.00	0.350
		3.2	0.153	10.24	0.315
		3.4	0.109	11.56	0.286
		3.6	0.070	12.96	0.260
		3.8	0.035	14.44	0.236
		4.0	0.004	16.00	0.214
		4.2	-.022	17.64	0.196
		4.4	-.045	19.36	0.180
		4.6	-.064	21.16	0.164
		4.8	-.080	23.04	0.148
		5.0	-.092	25.00	0.132
		5.2	-.101	27.04	0.112
		5.4	-.107	29.16	0.090
		5.6	-.110	31.36	0.068
		5.8	-.110	33.64	0.040
		6.0	-.110	36.00	0.027

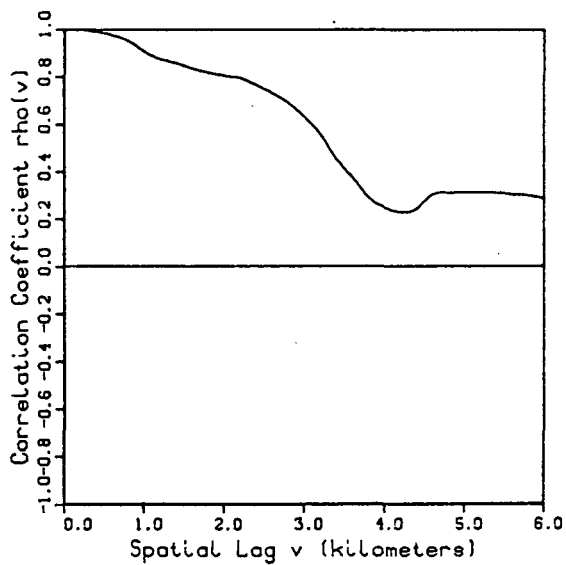
Walnut Gulch, Arizona

Ac=154.21 sq.km.

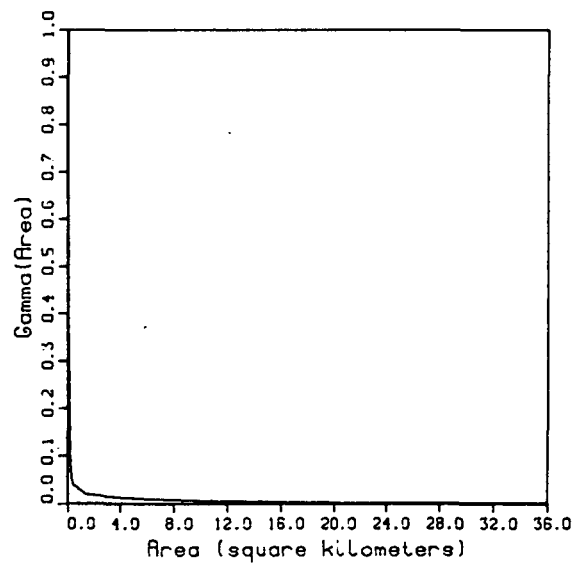
Storm Day
Aug 9 ,1977



Spatial Correlation



Variance Function



Storm Day Aug 9 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.606$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.394$

Expected Value of Point Depth (mm.): $E(Y)=0.389$

Variance of Point Depth (mm. sq.): $Var(Y)=3.825$

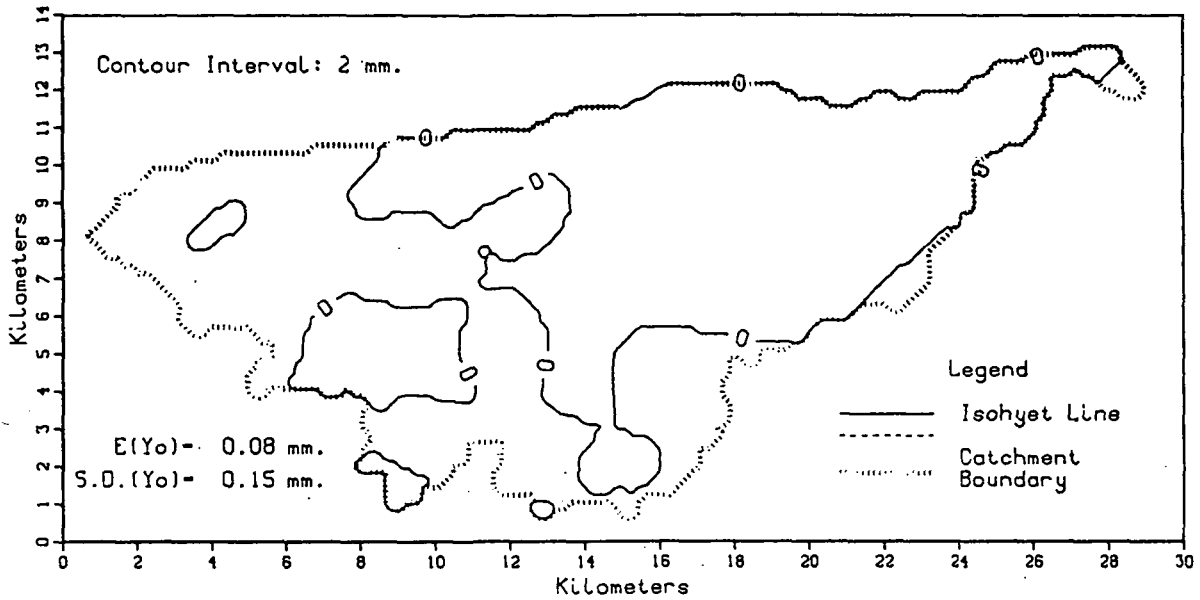
Coef. of Skewness of Point Depth: $S.C.(Y)=8.884$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.053	0.0	1.000	0.00	1.000
2	0.020	0.2	0.997	0.04	0.583
3	0.018	0.4	0.989	0.16	0.216
4	0.015	0.6	0.973	0.36	0.054
5	0.013	0.8	0.947	0.64	0.037
6	0.012	1.0	0.903	1.00	0.028
7	0.011	1.2	0.872	1.44	0.020
8	0.010	1.4	0.854	1.96	0.017
9	0.009	1.6	0.832	2.56	0.015
10	0.008	1.8	0.814	3.24	0.014
11	0.008	2.0	0.801	4.00	0.012
12	0.007	2.2	0.792	4.84	0.010
13	0.007	2.4	0.763	5.76	0.009
14	0.006	2.6	0.729	6.76	0.008
15	0.006	2.8	0.688	7.84	0.007
16	0.005	3.0	0.630	9.00	0.006
17	0.005	3.2	0.554	10.24	0.005
18	0.004	3.4	0.450	11.56	0.004
19	0.004	3.6	0.373	12.96	0.003
20	0.003	3.8	0.289	14.44	0.003
21	0.002	4.0	0.246	16.00	0.002
22	0.001	4.2	0.228	17.64	0.002
23	0.001	4.4	0.244	19.36	0.001
24	0.001	4.6	0.308	21.16	0.001
25	0.000	4.8	0.312	23.04	0.001
26	0.000	5.0	0.313	25.00	0.001
		5.2	0.313	27.04	0.000
		5.4	0.312	29.16	0.000
		5.6	0.304	31.36	0.000
		5.8	0.299	33.64	0.000
		6.0	0.286	36.00	0.000

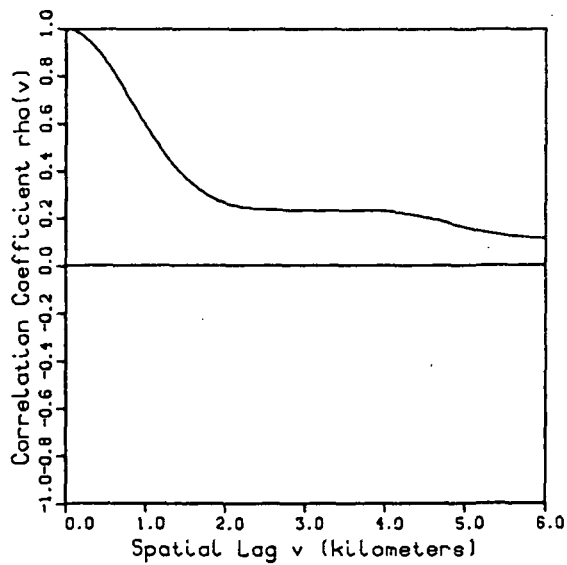
Walnut Gulch, Arizona

Ac=154.21 sq.km.

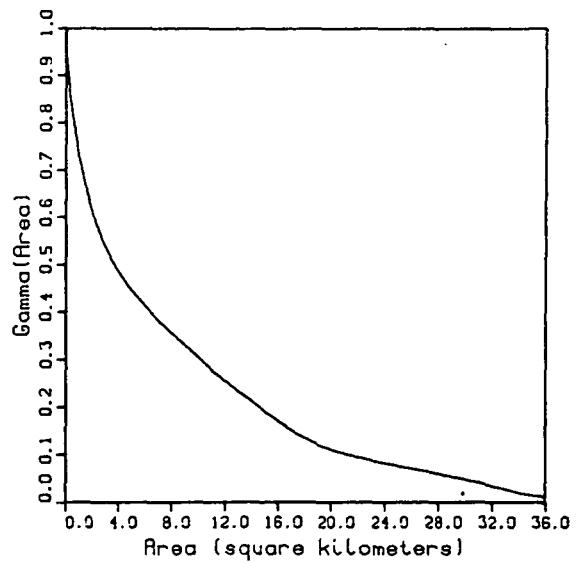
Storm Day
Aug 10, 1977



Spatial Correlation



Variance Function



Storm Day Aug 10 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.565$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.435$

Expected Value of Point Depth (mm.): $E(Y) = 0.080$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.016$

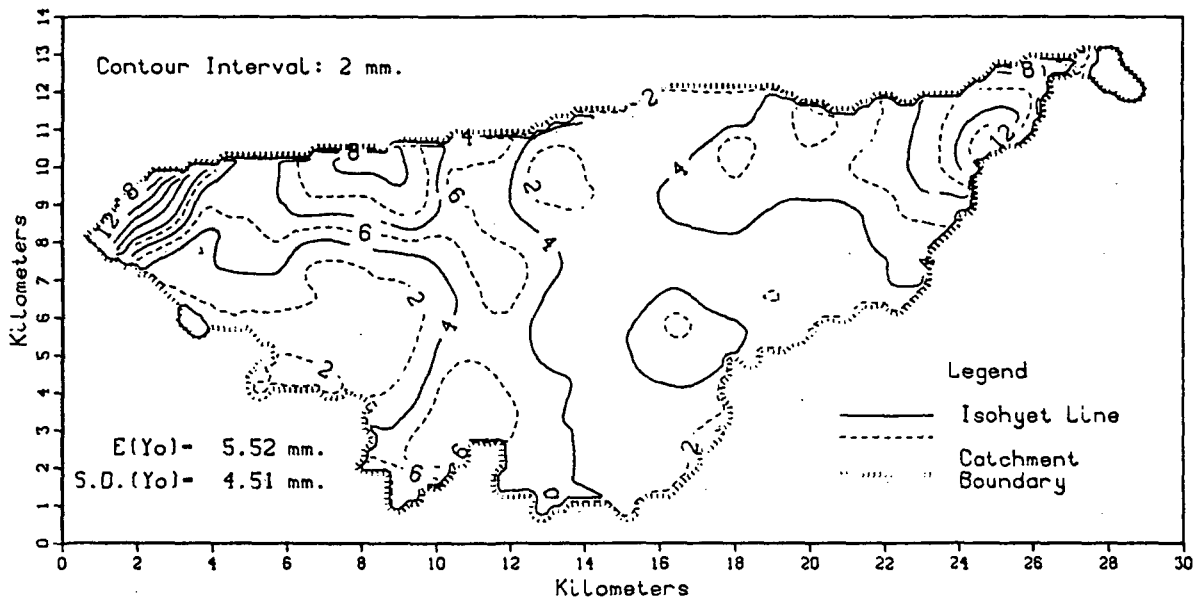
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.481$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.974	0.04	0.964
		0.4	0.906	0.16	0.917
		0.6	0.810	0.36	0.858
		0.8	0.700	0.64	0.796
		1.0	0.588	1.00	0.732
		1.2	0.487	1.44	0.672
		1.4	0.402	1.96	0.616
		1.6	0.337	2.56	0.566
		1.8	0.291	3.24	0.522
		2.0	0.262	4.00	0.483
		2.2	0.246	4.84	0.449
		2.4	0.238	5.76	0.418
		2.6	0.235	6.76	0.388
		2.8	0.232	7.84	0.359
		3.0	0.231	9.00	0.329
		3.2	0.231	10.24	0.297
		3.4	0.232	11.56	0.265
		3.6	0.233	12.96	0.233
		3.8	0.233	14.44	0.201
		4.0	0.229	16.00	0.169
		4.2	0.222	17.64	0.138
		4.4	0.210	19.36	0.115
		4.6	0.196	21.16	0.100
		4.8	0.178	23.04	0.086
		5.0	0.160	25.00	0.074
		5.2	0.143	27.04	0.064
		5.4	0.131	29.16	0.051
		5.6	0.123	31.36	0.038
		5.8	0.117	33.64	0.021
		6.0	0.111	36.00	0.010

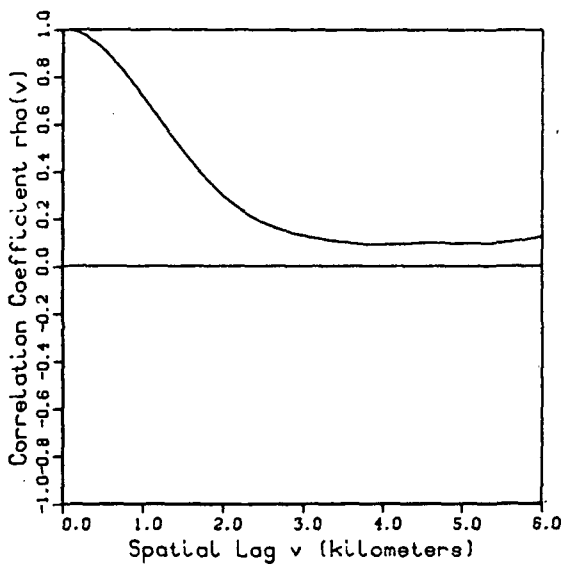
Walnut Gulch, Arizona

Ac=154.21 sq.km.

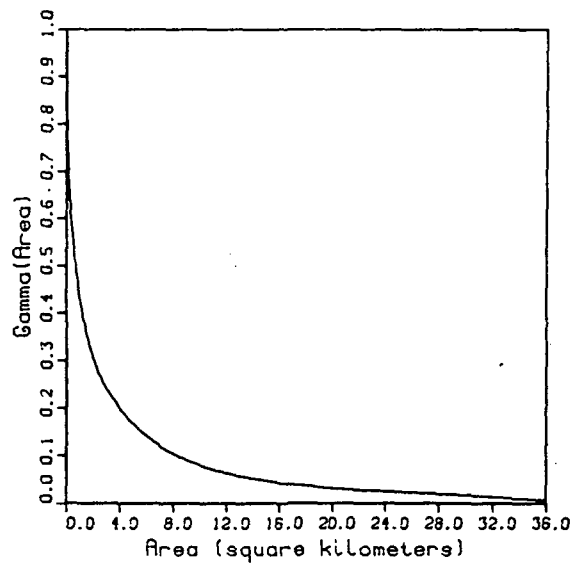
Storm Day
Aug 11, 1977



Spatial Correlation



Variance Function



Storm Day Aug 11 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.005$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.995$

Expected Value of Point Depth (mm.): $E(Y) = 5.039$

Variance of Point Depth (mm. sq.): $Var(Y) = 11.869$

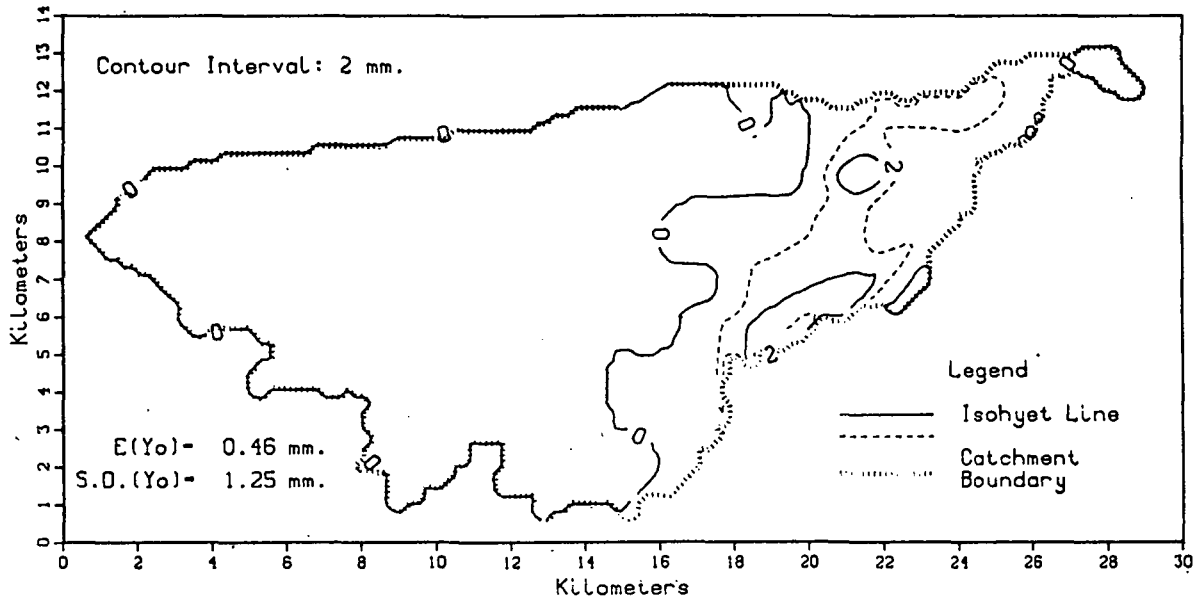
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.854$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
Acw/Ac (Y≥y)					
1	0.987	0.0	1.000	0.00	1.000
2	0.909	0.2	0.985	0.04	0.839
3	0.756	0.4	0.945	0.16	0.712
4	0.524	0.6	0.882	0.36	0.602
5	0.380	0.8	0.802	0.64	0.514
6	0.257	1.0	0.713	1.00	0.434
7	0.165	1.2	0.620	1.44	0.363
8	0.118	1.4	0.529	1.96	0.305
9	0.094	1.6	0.442	2.56	0.263
10	0.072	1.8	0.365	3.24	0.228
11	0.054	2.0	0.296	4.00	0.198
12	0.036	2.2	0.243	4.84	0.171
13	0.023	2.4	0.201	5.76	0.146
14	0.019	2.6	0.169	6.76	0.124
15	0.015	2.8	0.146	7.84	0.105
16	0.012	3.0	0.128	9.00	0.089
17	0.011	3.2	0.116	10.24	0.076
18	0.010	3.4	0.105	11.56	0.065
19	0.009	3.6	0.096	12.96	0.056
20	0.008	3.8	0.092	14.44	0.048
21	0.007	4.0	0.092	16.00	0.042
22	0.007	4.2	0.095	17.64	0.036
23	0.006	4.4	0.100	19.36	0.031
24	0.005	4.6	0.099	21.16	0.028
25	0.004	4.8	0.097	23.04	0.025
26	0.003	5.0	0.096	25.00	0.023
27	0.002	5.2	0.096	27.04	0.020
28	0.002	5.4	0.100	29.16	0.017
29	0.001	5.6	0.106	31.36	0.013
30	0.000	5.8	0.116	33.64	0.009
31	0.000	6.0	0.127	36.00	0.005

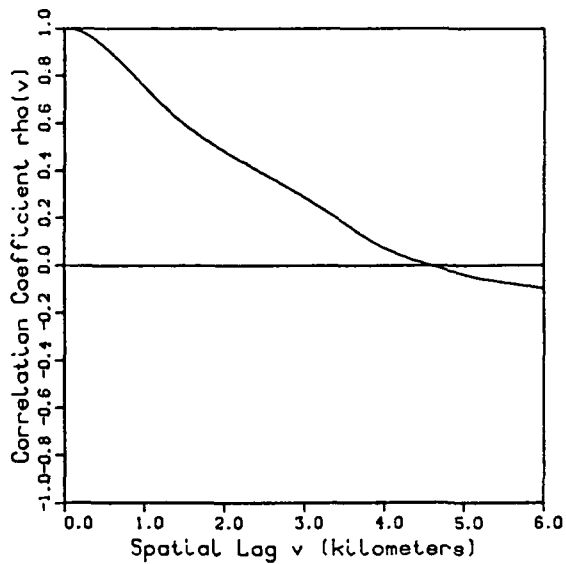
Walnut Gulch, Arizona

Ac=154.21 sq.km.

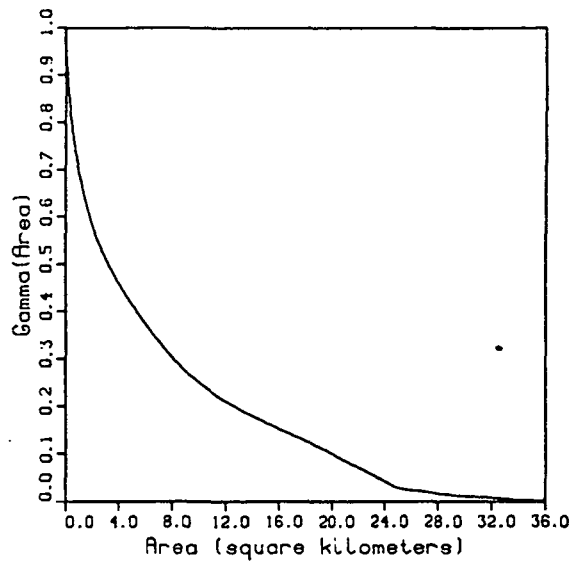
Storm Day
Aug 12, 1977



Spatial Correlation



Variance Function



Storm Day Aug 12 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.697$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.303$

Expected Value of Point Depth (mm.): $E(Y) = 0.477$

Variance of Point Depth (mm. sq.): $Var(Y) = 1.211$

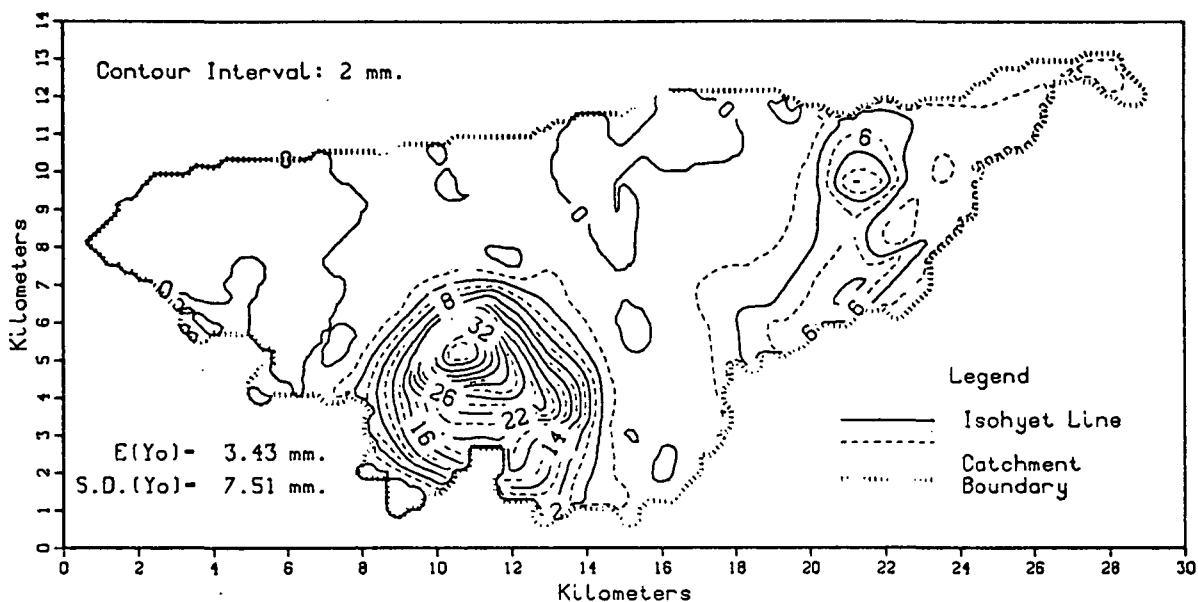
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.768$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.159	0.0	1.000	0.00	1.000
2	0.098	0.2	0.986	0.04	0.953
3	0.051	0.4	0.946	0.16	0.892
4	0.026	0.6	0.889	0.36	0.826
5	0.012	0.8	0.821	0.64	0.759
6	0.002	1.0	0.749	1.00	0.695
7	0.000	1.2	0.680	1.44	0.637
		1.4	0.619	1.96	0.584
		1.6	0.566	2.56	0.539
		1.8	0.519	3.24	0.497
		2.0	0.478	4.00	0.457
		2.2	0.439	4.84	0.418
		2.4	0.402	5.76	0.380
		2.6	0.364	6.76	0.342
		2.8	0.325	7.84	0.306
		3.0	0.284	9.00	0.274
		3.2	0.242	10.24	0.244
		3.4	0.198	11.56	0.218
		3.6	0.152	12.96	0.194
		3.8	0.108	14.44	0.173
		4.0	0.070	16.00	0.152
		4.2	0.041	17.64	0.131
		4.4	0.016	19.36	0.108
		4.6	-.006	21.16	0.083
		4.8	-.025	23.04	0.056
		5.0	-.043	25.00	0.028
		5.2	-.060	27.04	0.020
		5.4	-.073	29.16	0.012
		5.6	-.082	31.36	0.008
		5.8	-.092	33.64	0.003
		6.0	-.103	36.00	0.001

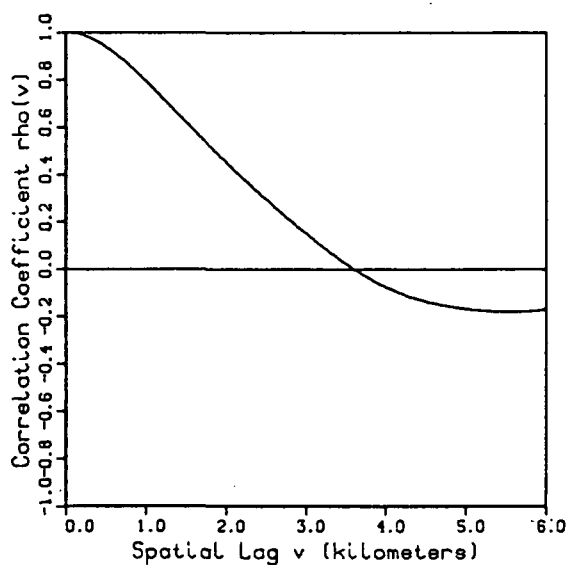
Walnut Gulch, Arizona

Ac=154.21 sq.km.

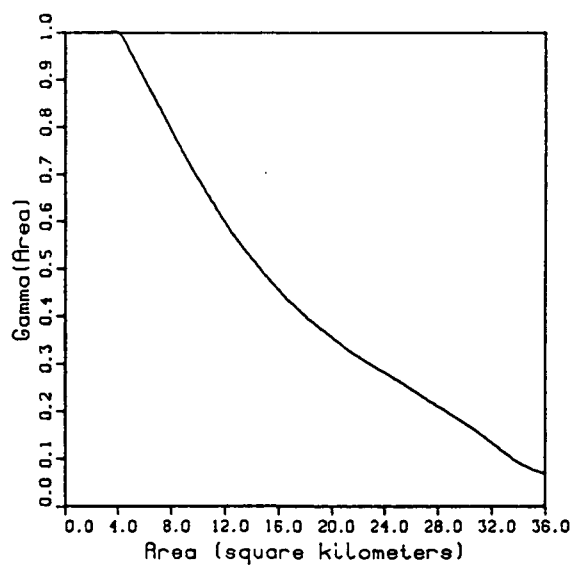
Storm Day
Aug 13, 1977



Spatial Correlation



Variance Function



Storm Day Aug 13 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.199$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.801$

Expected Value of Point Depth (mm.): $E(Y) = 4.176$

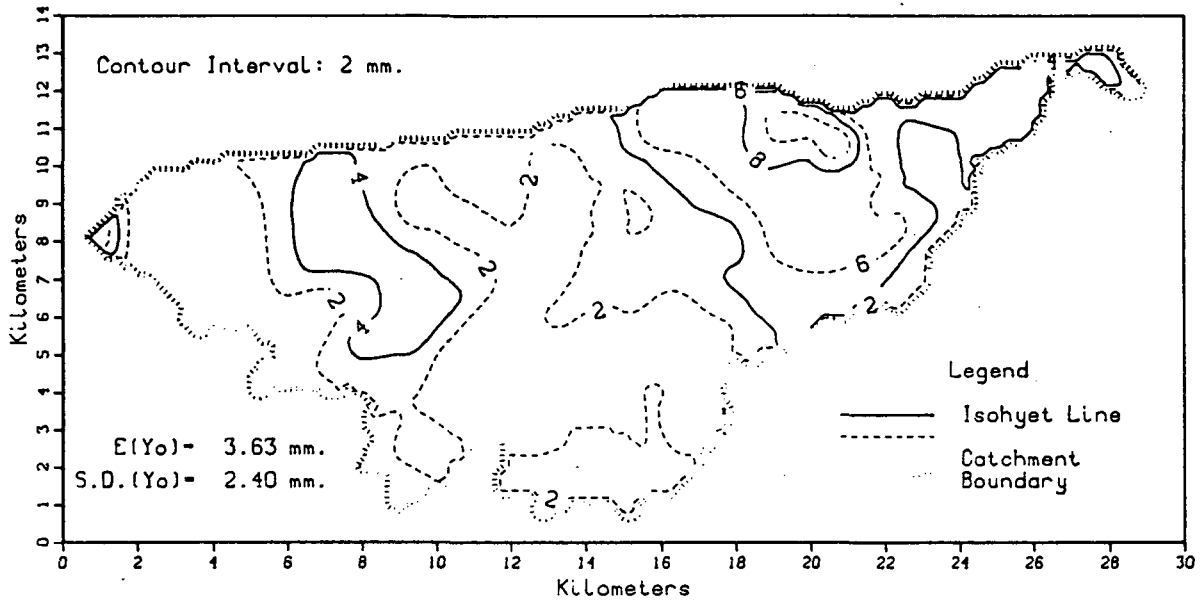
Variance of Point Depth (mm. sq.): $Var(Y) = 61.200$

Coef. of Skewness of Point Depth: $S.C.(Y) = 3.111$

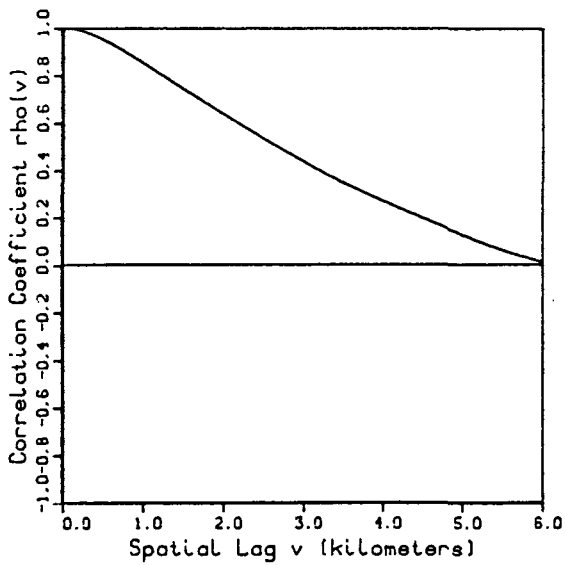
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.519	0.0	1.000	0.00	1.000
3	0.308	0.2	0.989	0.04	1.033
5	0.223	0.4	0.959	0.16	1.060
7	0.163	0.6	0.913	0.36	1.079
9	0.129	0.8	0.856	0.64	1.089
11	0.112	1.0	0.791	1.00	1.092
13	0.098	1.2	0.722	1.44	1.091
15	0.087	1.4	0.651	1.96	1.082
17	0.075	1.6	0.581	2.56	1.063
19	0.065	1.8	0.513	3.24	1.038
21	0.054	2.0	0.448	4.00	1.004
23	0.045	2.2	0.385	4.84	0.961
25	0.037	2.4	0.323	5.76	0.911
27	0.031	2.6	0.263	6.76	0.858
29	0.026	2.8	0.204	7.84	0.801
31	0.022	3.0	0.148	9.00	0.740
33	0.018	3.2	0.095	10.24	0.679
35	0.016	3.4	0.045	11.56	0.618
37	0.014	3.6	-0.002	12.96	0.560
39	0.012	3.8	-0.043	14.44	0.506
41	0.010	4.0	-0.079	16.00	0.456
43	0.008	4.2	-0.107	17.64	0.410
45	0.006	4.4	-0.130	19.36	0.368
47	0.004	4.6	-0.148	21.16	0.331
49	0.003	4.8	-0.161	23.04	0.296
51	0.001	5.0	-0.171	25.00	0.263
		5.2	-0.178	27.04	0.226
		5.4	-0.183	29.16	0.188
		5.6	-0.184	31.36	0.147
		5.8	-0.180	33.64	0.098
		6.0	-0.172	36.00	0.068

Walnut Gulch, Arizona
Ac=154.21 sq.km.

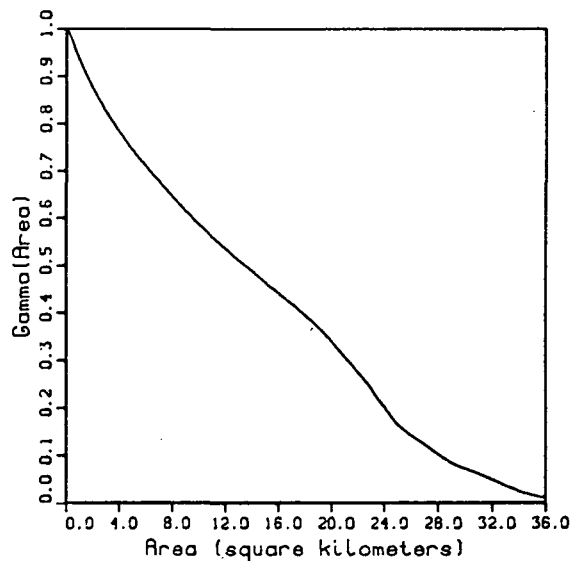
Storm Day
Aug 14, 1977



Spatial Correlation



Variance Function



Storm Day Aug 14 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 3.295$

Variance of Point Depth (mm. sq.): $Var(Y) = 4.619$

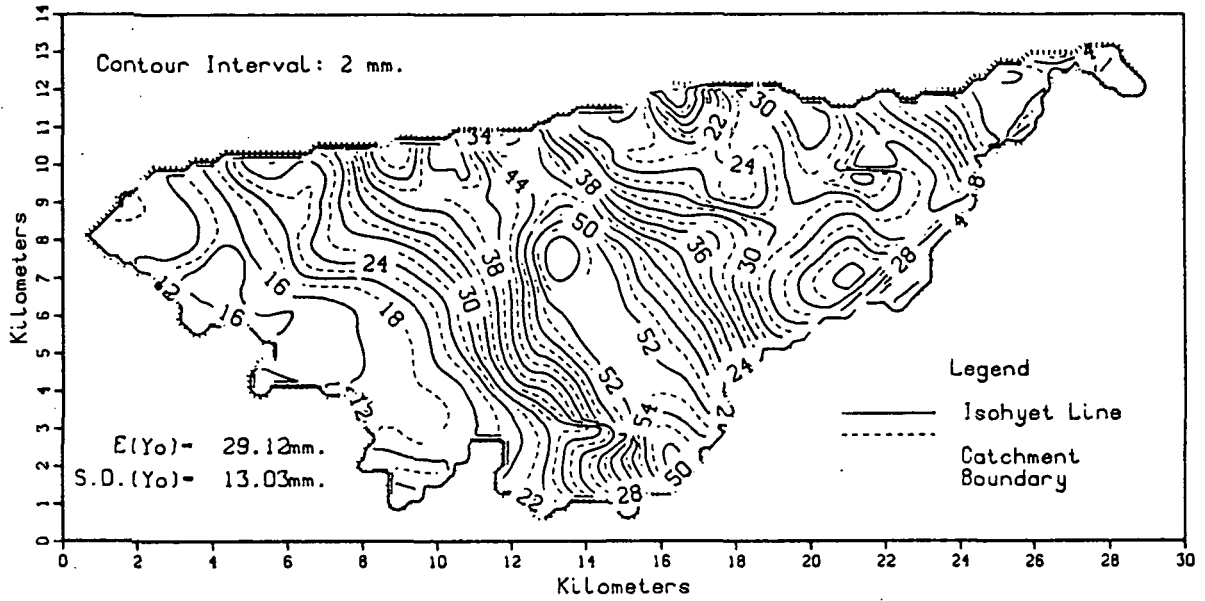
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.047$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.925	0.0	1.000	0.00	1.000
2	0.643	0.2	0.991	0.04	1.001
3	0.448	0.4	0.967	0.16	0.997
4	0.323	0.6	0.933	0.36	0.985
5	0.198	0.8	0.894	0.64	0.964
6	0.126	1.0	0.851	1.00	0.938
7	0.081	1.2	0.807	1.44	0.908
8	0.031	1.4	0.762	1.96	0.878
9	0.021	1.6	0.719	2.56	0.846
10	0.010	1.8	0.676	3.24	0.813
11	0.000	2.0	0.634	4.00	0.781
12	0.000	2.2	0.593	4.84	0.749
		2.4	0.552	5.76	0.716
		2.6	0.512	6.76	0.684
		2.8	0.473	7.84	0.650
		3.0	0.434	9.00	0.615
		3.2	0.397	10.24	0.580
		3.4	0.362	11.56	0.546
		3.6	0.330	12.96	0.512
		3.8	0.299	14.44	0.478
		4.0	0.269	16.00	0.442
		4.2	0.240	17.64	0.404
		4.4	0.212	19.36	0.359
		4.6	0.183	21.16	0.303
		4.8	0.155	23.04	0.240
		5.0	0.126	25.00	0.165
		5.2	0.098	27.04	0.122
		5.4	0.073	29.16	0.081
		5.6	0.051	31.36	0.057
		5.8	0.030	33.64	0.028
		6.0	0.012	36.00	0.010

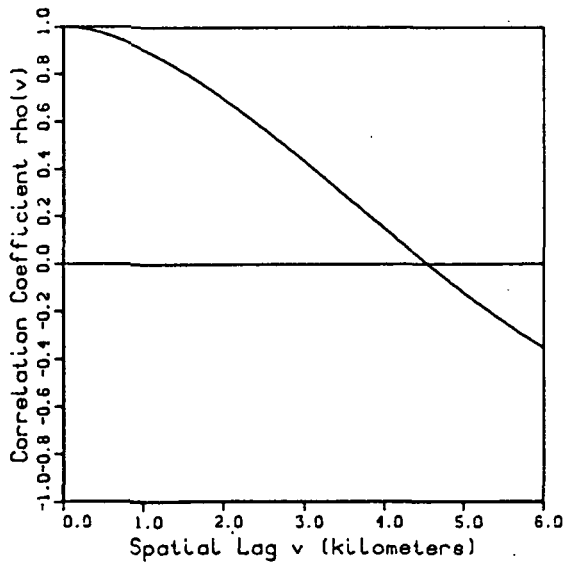
Walnut Gulch, Arizona

Ac=154.21 sq.km.

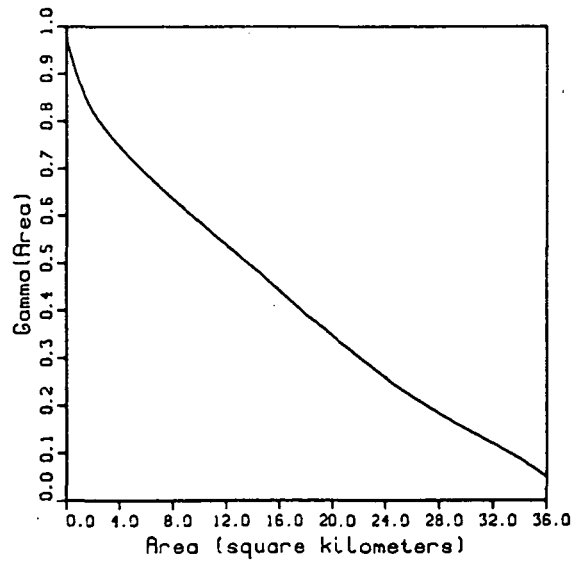
Storm Day
Aug 15, 1977



Spatial Correlation



Variance Function



Storm Day Aug 15 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 29.362$

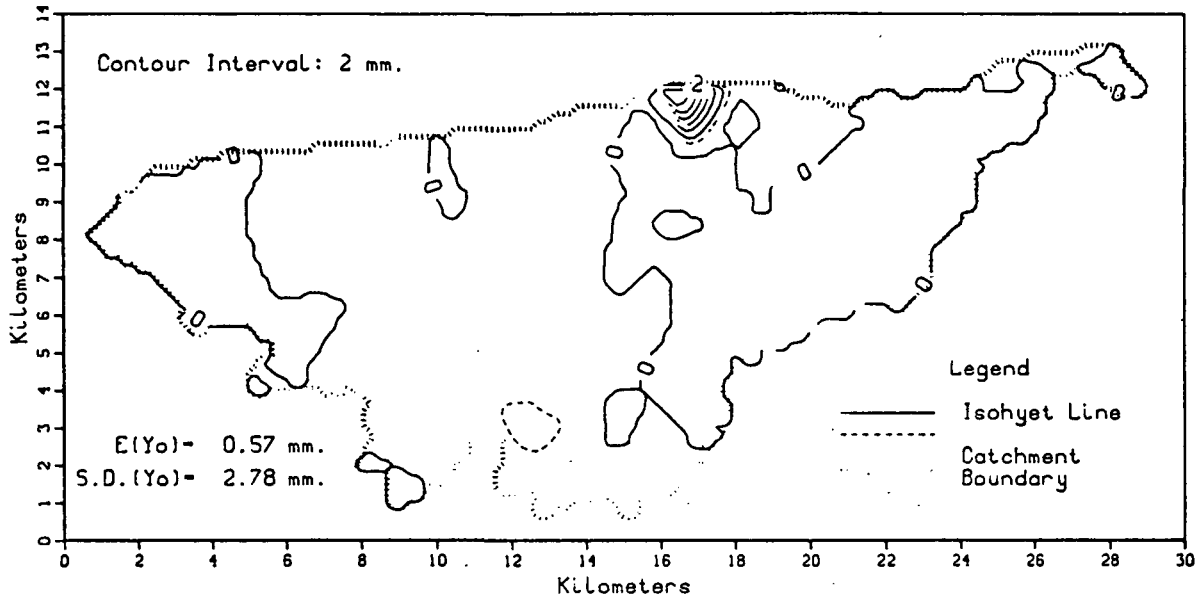
Variance of Point Depth (mm. sq.): $Var(Y)=167.995$

Coef. of Skewness of Point Depth: $S.C.(Y) = 0.474$

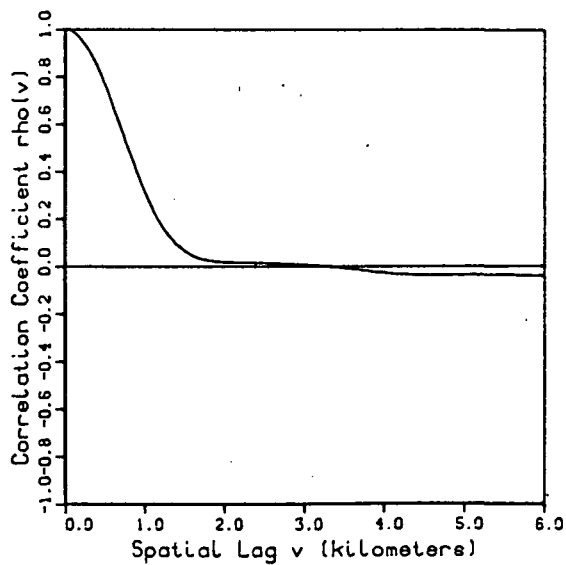
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
3	0.999	0.2	0.994	0.04	0.981
5	0.996	0.4	0.980	0.16	0.960
7	0.990	0.6	0.959	0.36	0.937
9	0.977	0.8	0.932	0.64	0.911
11	0.956	1.0	0.902	1.00	0.882
13	0.934	1.2	0.867	1.44	0.850
15	0.915	1.4	0.828	1.96	0.821
17	0.827	1.6	0.787	2.56	0.796
19	0.761	1.8	0.742	3.24	0.770
21	0.711	2.0	0.694	4.00	0.745
23	0.640	2.2	0.645	4.84	0.719
25	0.558	2.4	0.593	5.76	0.693
27	0.492	2.6	0.541	6.76	0.666
29	0.436	2.8	0.488	7.84	0.637
31	0.391	3.0	0.432	9.00	0.608
33	0.355	3.2	0.375	10.24	0.578
35	0.320	3.4	0.318	11.56	0.547
37	0.282	3.6	0.261	12.96	0.514
39	0.246	3.8	0.204	14.44	0.479
41	0.216	4.0	0.147	16.00	0.440
43	0.188	4.2	0.091	17.64	0.399
45	0.160	4.4	0.036	19.36	0.360
47	0.137	4.6	-0.018	21.16	0.321
49	0.115	4.8	-0.072	23.04	0.279
51	0.093	5.0	-0.124	25.00	0.236
53	0.058	5.2	-0.175	27.04	0.199
55	0.025	5.4	-0.224	29.16	0.162
57	0.013	5.6	-0.272	31.36	0.128
59	0.005	5.8	-0.316	33.64	0.092

Walnut Gulch, Arizona
Ac=154.21 sq.km.

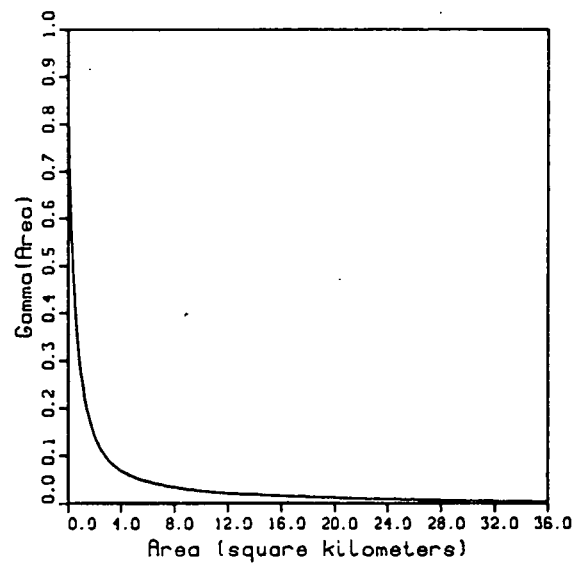
Storm Day
Aug 16, 1977



Spatial Correlation



Variance Function



Storm Day Aug 16 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.403$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.597$

Expected Value of Point Depth (mm.): $E(Y) = 0.480$

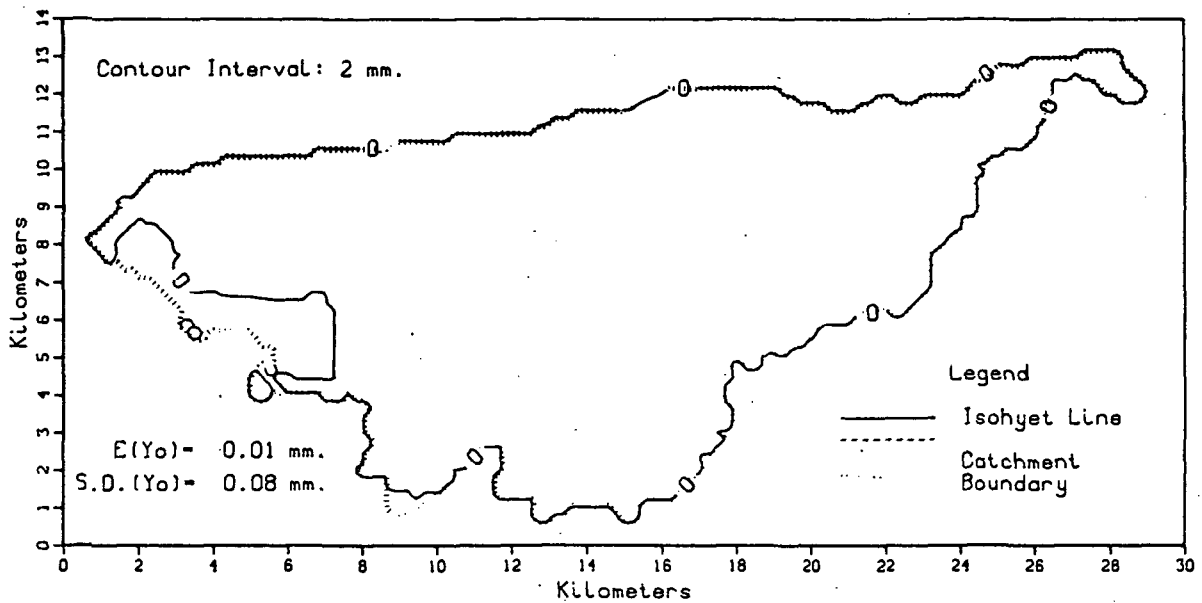
Variance of Point Depth (mm. sq.): $Var(Y) = 3.077$

Coef. of Skewness of Point Depth: $S.C.(Y) = 10.653$

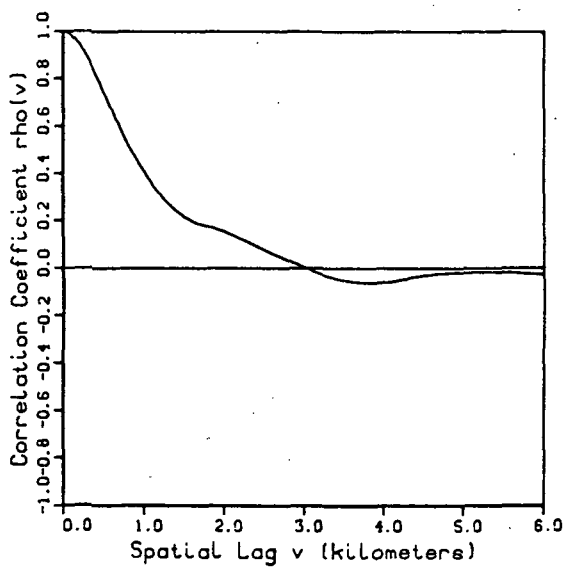
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.098	0.0	1.000	0.00	1.000
2	0.022	0.2	0.962	0.04	0.842
3	0.012	0.4	0.850	0.16	0.674
4	0.011	0.6	0.682	0.36	0.515
5	0.010	0.8	0.490	0.64	0.379
6	0.009	1.0	0.315	1.00	0.274
7	0.008	1.2	0.181	1.44	0.198
8	0.008	1.4	0.093	1.96	0.145
9	0.007	1.6	0.045	2.56	0.110
10	0.007	1.8	0.022	3.24	0.085
11	0.006	2.0	0.015	4.00	0.068
12	0.006	2.2	0.014	4.84	0.056
13	0.005	2.4	0.012	5.76	0.047
14	0.005	2.6	0.010	6.76	0.039
15	0.005	2.8	0.007	7.84	0.033
16	0.004	3.0	0.003	9.00	0.028
17	0.004	3.2	0.000	10.24	0.024
18	0.003	3.4	-0.006	11.56	0.021
19	0.003	3.6	-0.014	12.96	0.019
20	0.003	3.8	-0.022	14.44	0.016
21	0.002	4.0	-0.030	16.00	0.015
22	0.002	4.2	-0.037	17.64	0.013
23	0.001	4.4	-0.040	19.36	0.011
24	0.001	4.6	-0.040	21.16	0.010
25	0.001	4.8	-0.039	23.04	0.008
26	0.000	5.0	-0.039	25.00	0.007
27	0.000	5.2	-0.039	27.04	0.006
		5.4	-0.040	29.16	0.004
		5.6	-0.042	31.36	0.003
		5.8	-0.043	33.64	0.003
		6.0	-0.045	36.00	0.002

Walnut Gulch, Arizona
 $A_c = 154.21 \text{ sq.km.}$

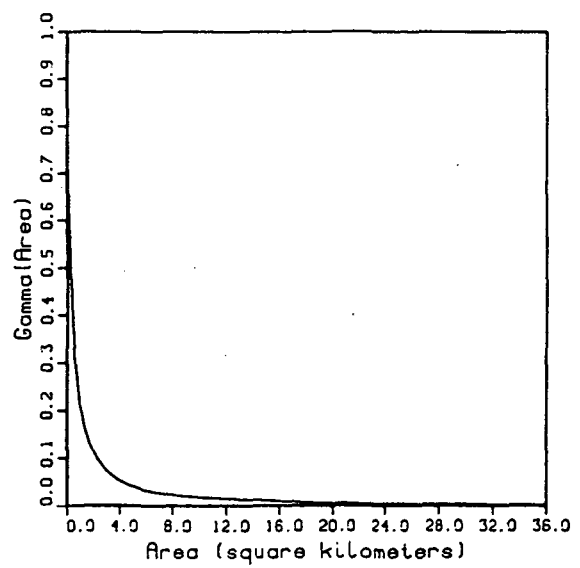
Storm Day
 Aug 17, 1977



Spatial Correlation



Variance Function



Storm Day Aug 17 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.943$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.057$

Expected Value of Point Depth (mm.): $E(Y) = 0.010$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.004$

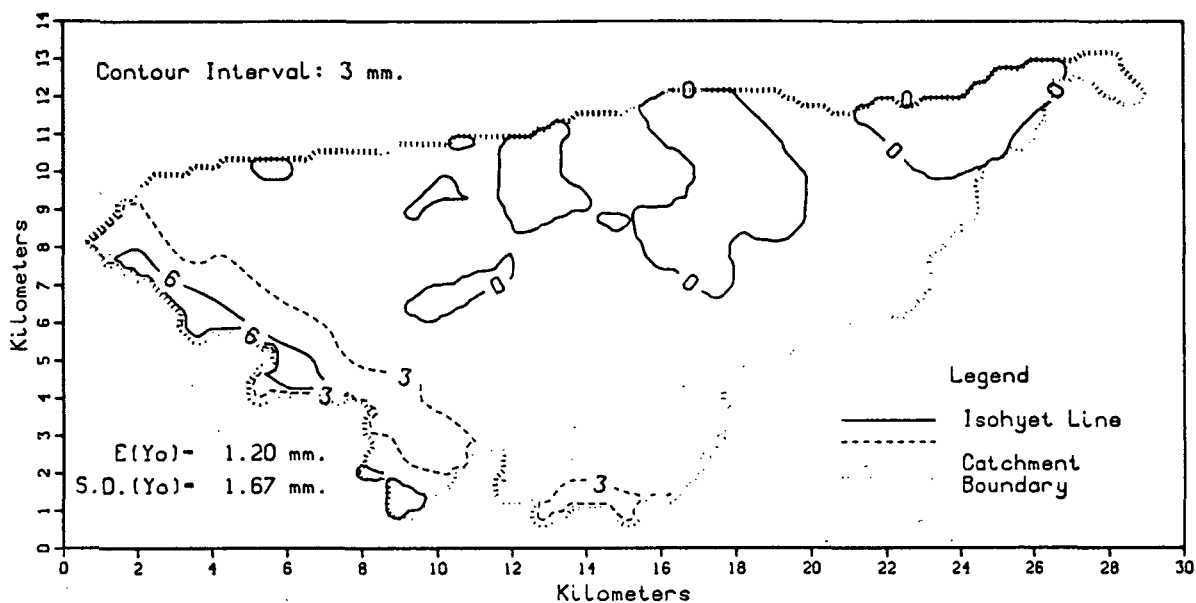
Coef. of Skewness of Point Depth: $S.C.(Y) = 8.661$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.944	0.04	0.822
		0.4	0.822	0.16	0.622
		0.6	0.671	0.36	0.439
		0.8	0.522	0.64	0.304
		1.0	0.408	1.00	0.216
		1.2	0.312	1.44	0.158
		1.4	0.241	1.96	0.117
		1.6	0.194	2.56	0.088
		1.8	0.172	3.24	0.067
		2.0	0.152	4.00	0.052
		2.2	0.122	4.84	0.041
		2.4	0.089	5.76	0.033
		2.6	0.058	6.76	0.027
		2.8	0.029	7.84	0.023
		3.0	0.000	9.00	0.019
		3.2	-.027	10.24	0.017
		3.4	-.048	11.56	0.015
		3.6	-.060	12.96	0.013
		3.8	-.064	14.44	0.011
		4.0	-.060	16.00	0.009
		4.2	-.051	17.64	0.006
		4.4	-.037	19.36	0.004
		4.6	-.028	21.16	0.003
		4.8	-.021	23.04	0.003
		5.0	-.019	25.00	0.002
		5.2	-.018	27.04	0.002
		5.4	-.019	29.16	0.002
		5.6	-.022	31.36	0.001
		5.8	-.027	33.64	0.001
		6.0	-.031	36.00	0.000

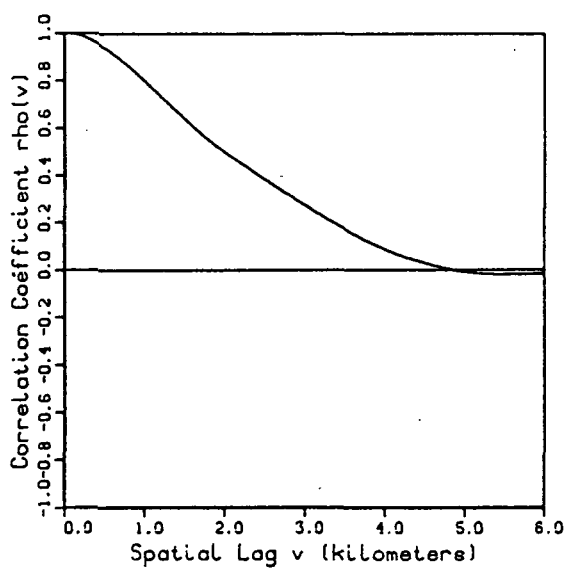
Walnut Gulch, Arizona

Ac=154.21 sq.km.

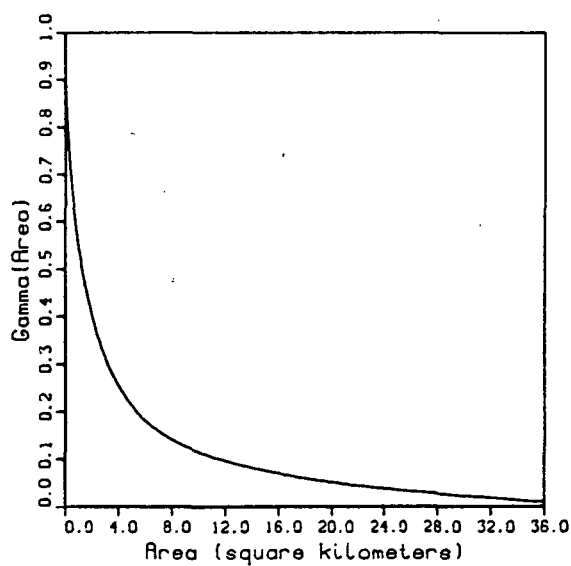
Storm Day
Aug 18, 1977



Spatial Correlation



Variance Function



Storm Day Aug 18 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.167$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.833$

Expected Value of Point Depth (mm.): $E(Y) = 1.267$

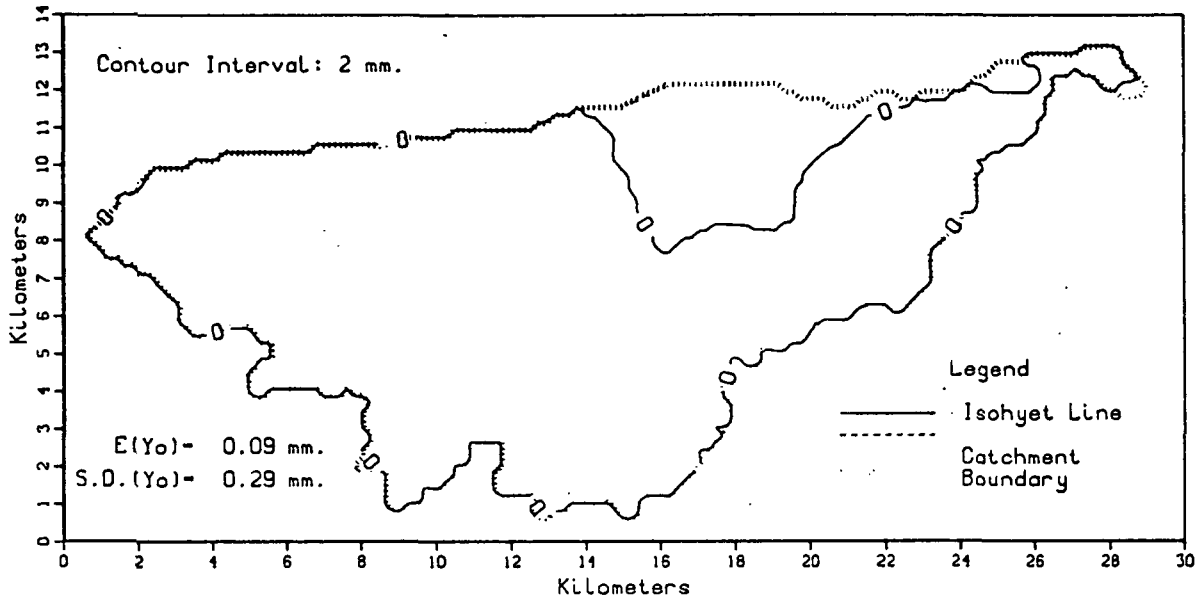
Variance of Point Depth (mm. sq.): $Var(Y) = 2.290$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.775$

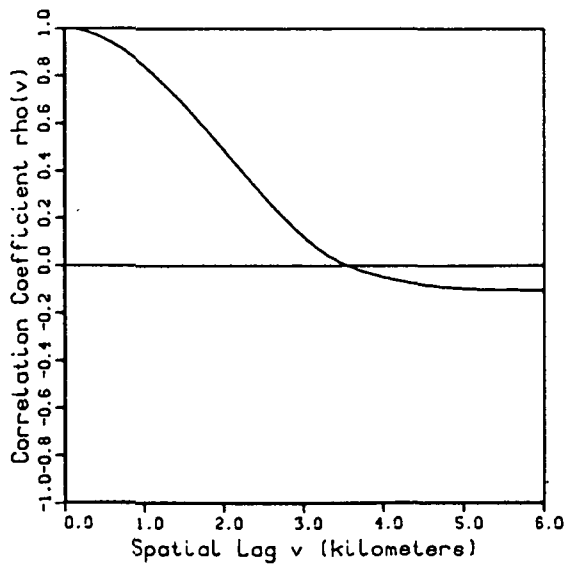
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.442	0.0	1.000	0.00	1.000
2	0.202	0.2	0.989	0.04	0.914
3	0.106	0.4	0.959	0.16	0.818
4	0.066	0.6	0.915	0.36	0.722
5	0.042	0.8	0.862	0.64	0.635
6	0.021	1.0	0.800	1.00	0.552
7	0.002	1.2	0.735	1.44	0.476
8	0.000	1.4	0.671	1.96	0.408
		1.6	0.609	2.56	0.348
		1.8	0.551	3.24	0.296
		2.0	0.499	4.00	0.253
		2.2	0.452	4.84	0.217
		2.4	0.406	5.76	0.185
		2.6	0.361	6.76	0.162
		2.8	0.316	7.84	0.142
		3.0	0.273	9.00	0.126
		3.2	0.231	10.24	0.111
		3.4	0.191	11.56	0.099
		3.6	0.151	12.96	0.088
		3.8	0.116	14.44	0.078
		4.0	0.085	16.00	0.069
		4.2	0.058	17.64	0.060
		4.4	0.037	19.36	0.053
		4.6	0.017	21.16	0.046
		4.8	0.001	23.04	0.040
		5.0	-.011	25.00	0.034
		5.2	-.018	27.04	0.029
		5.4	-.021	29.16	0.023
		5.6	-.020	31.36	0.019
		5.8	-.019	33.64	0.013
		6.0	-.017	36.00	0.009

Walnut Gulch, Arizona
Ac=154.21 sq.km.

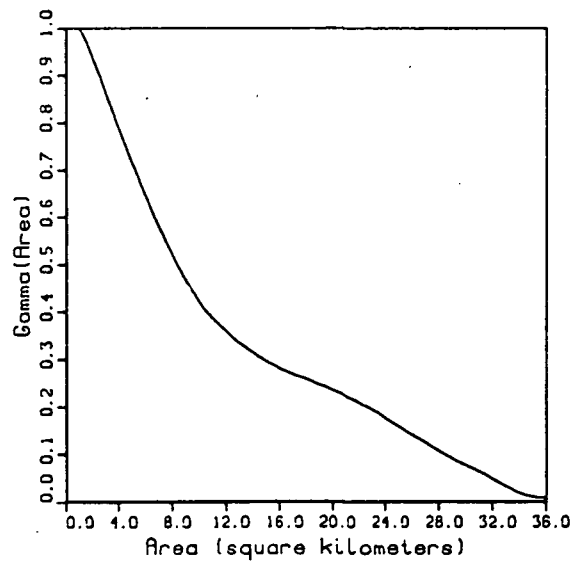
Storm Day
Aug 19, 1977



Spatial Correlation



Variance Function



Storm Day Aug 19 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.860$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.140$

Expected Value of Point Depth (mm.): $E(Y) = 0.077$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.064$

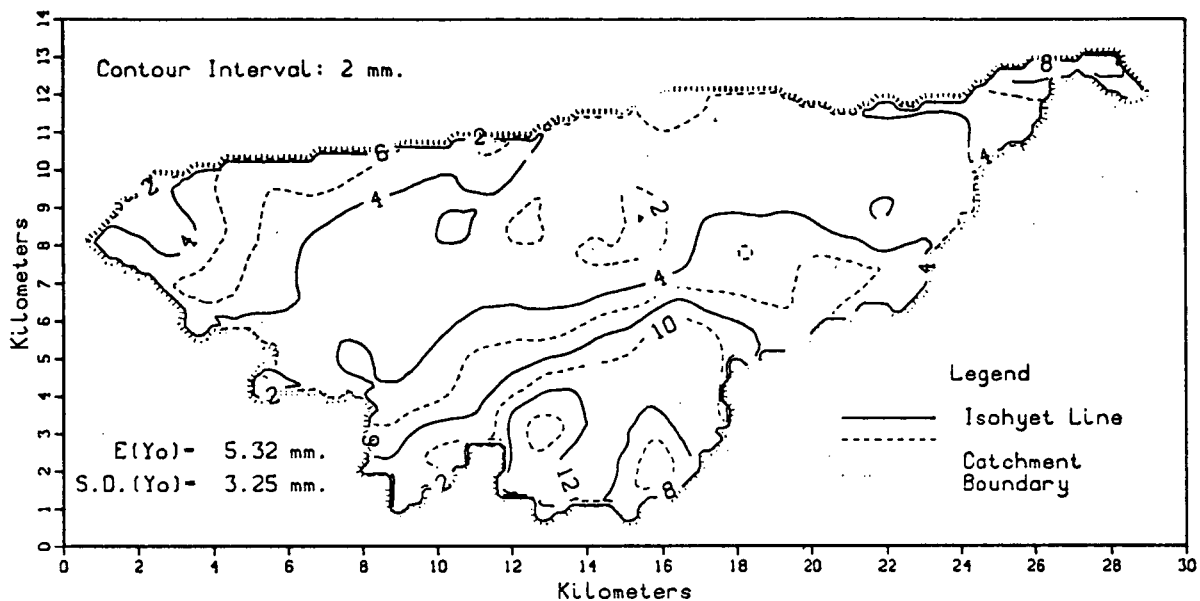
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.492$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.030	0.0	1.000	0.00	1.000
2	0.000	0.2	0.992	0.04	1.020
		0.4	0.971	0.16	1.033
		0.6	0.936	0.36	1.035
		0.8	0.892	0.64	1.024
		1.0	0.839	1.00	1.005
		1.2	0.778	1.44	0.978
		1.4	0.711	1.96	0.942
		1.6	0.639	2.56	0.896
		1.8	0.564	3.24	0.844
		2.0	0.486	4.00	0.786
		2.2	0.407	4.84	0.724
		2.4	0.330	5.76	0.659
		2.6	0.255	6.76	0.593
		2.8	0.185	7.84	0.527
		3.0	0.121	9.00	0.466
		3.2	0.065	10.24	0.410
		3.4	0.023	11.56	0.369
		3.6	-0.009	12.96	0.335
		3.8	-0.033	14.44	0.305
		4.0	-0.052	16.00	0.279
		4.2	-0.067	17.64	0.260
		4.4	-0.079	19.36	0.241
		4.6	-0.088	21.16	0.219
		4.8	-0.096	23.04	0.193
		5.0	-0.101	25.00	0.157
		5.2	-0.104	27.04	0.122
		5.4	-0.106	29.16	0.087
		5.6	-0.107	31.36	0.058
		5.8	-0.108	33.64	0.022
		6.0	-0.108	36.00	0.008

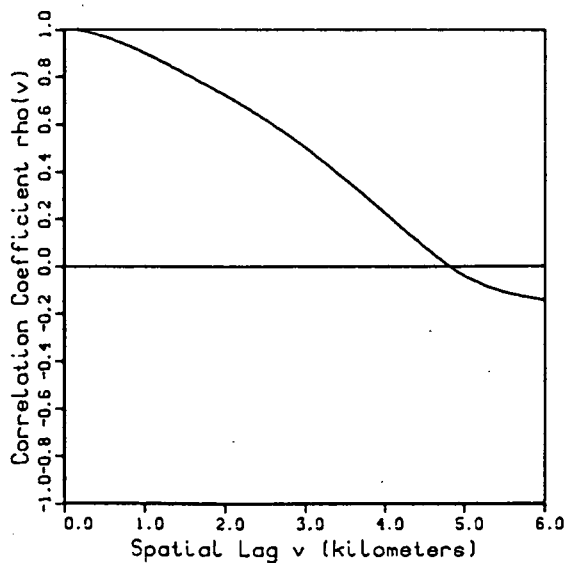
Walnut Gulch, Arizona

Ac=154.21 sq.km.

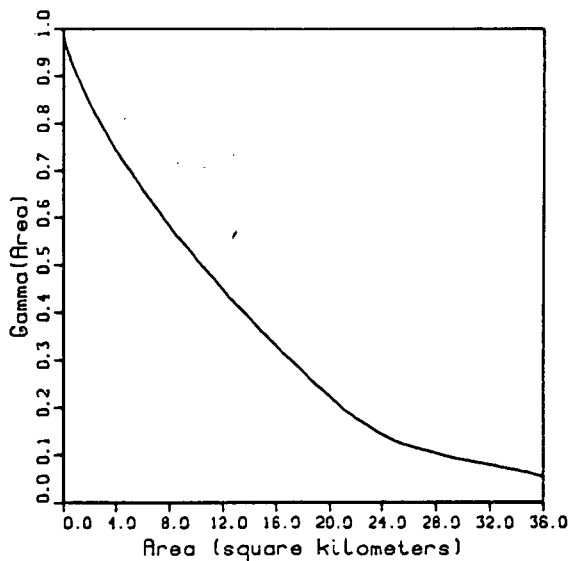
Storm Day
Aug 20, 1977



Spatial Correlation



Variance Function



Storm Day Aug 20 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 5.494$

Variance of Point Depth (mm. sq.): $Var(Y) = 9.799$

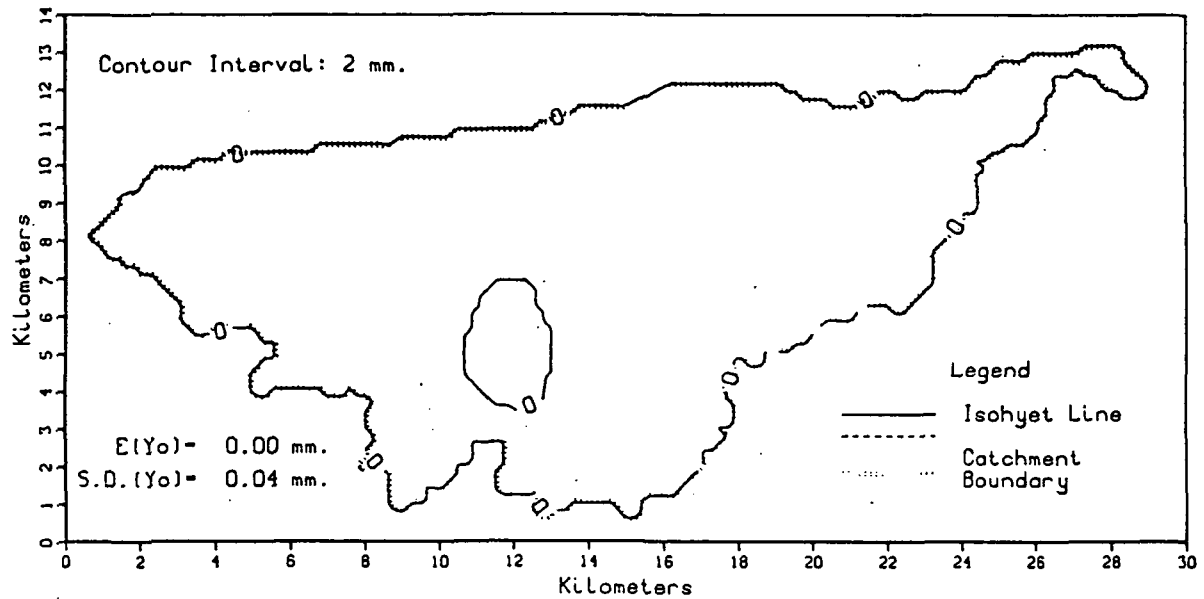
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.103$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.994	0.0	1.000	0.00	1.000
2	0.971	0.2	0.994	0.04	0.987
3	0.802	0.4	0.978	0.16	0.969
4	0.545	0.6	0.956	0.36	0.948
5	0.426	0.8	0.929	0.64	0.925
6	0.309	1.0	0.898	1.00	0.900
7	0.221	1.2	0.864	1.44	0.873
8	0.190	1.4	0.829	1.96	0.843
9	0.164	1.6	0.793	2.56	0.810
10	0.137	1.8	0.756	3.24	0.776
11	0.093	2.0	0.718	4.00	0.741
12	0.051	2.2	0.679	4.84	0.704
13	0.028	2.4	0.638	5.76	0.667
14	0.010	2.6	0.594	6.76	0.627
15	0.000	2.8	0.548	7.84	0.586
		3.0	0.499	9.00	0.545
		3.2	0.447	10.24	0.504
		3.4	0.393	11.56	0.461
		3.6	0.337	12.96	0.418
		3.8	0.280	14.44	0.374
		4.0	0.222	16.00	0.329
		4.2	0.165	17.64	0.284
		4.4	0.107	19.36	0.238
		4.6	0.052	21.16	0.195
		4.8	0.001	23.04	0.158
		5.0	-.043	25.00	0.128
		5.2	-.077	27.04	0.110
		5.4	-.103	29.16	0.093
		5.6	-.122	31.36	0.081
		5.8	-.136	33.64	0.069
		6.0	-.147	36.00	0.054

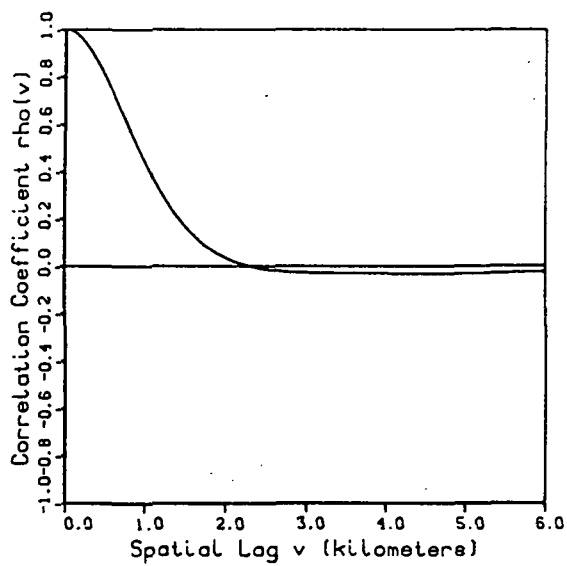
Walnut Gulch, Arizona

Ac=154.21 sq.km.

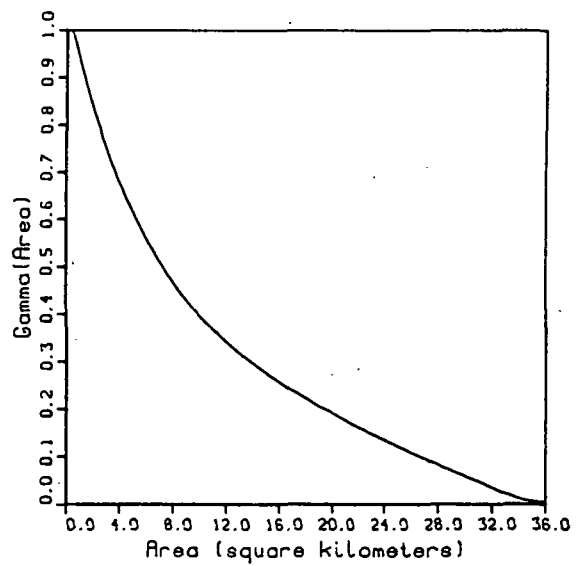
Storm Day
Aug 21, 1977



Spatial Correlation



Variance Function



Storm Day Aug 21 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c) = 0.952$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c) = 0.048$

Expected Value of Point Depth (mm.): $E(Y) = 0.006$

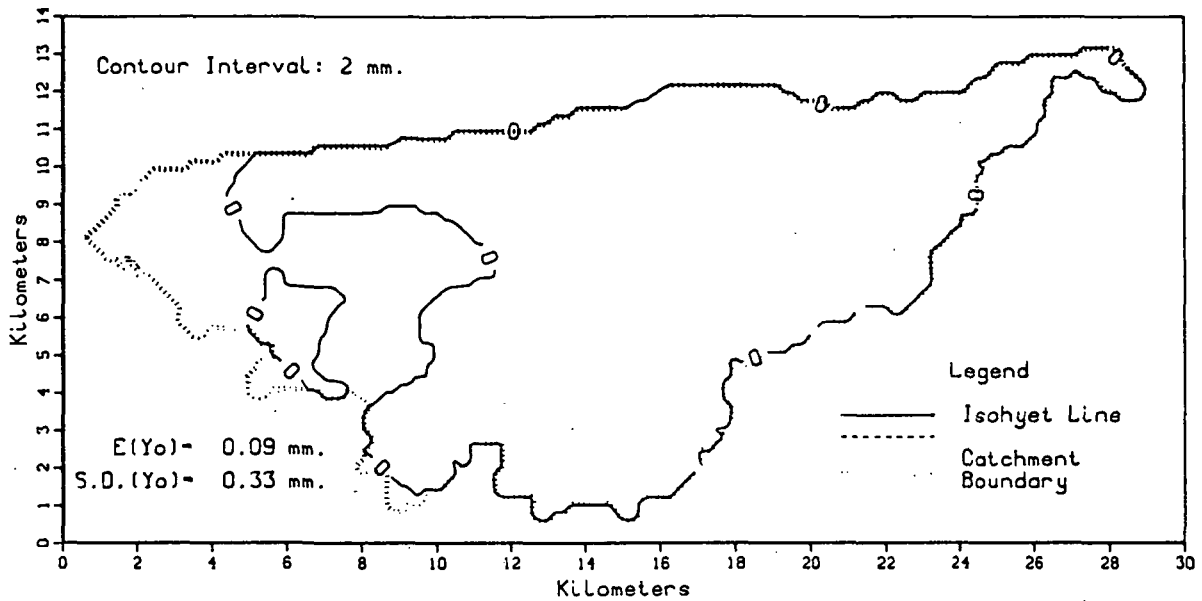
Variance of Point Depth (mm. sq.): $Var(Y) = 0.001$

Coef. of Skewness of Point Depth: $S.C.(Y) = 7.454$

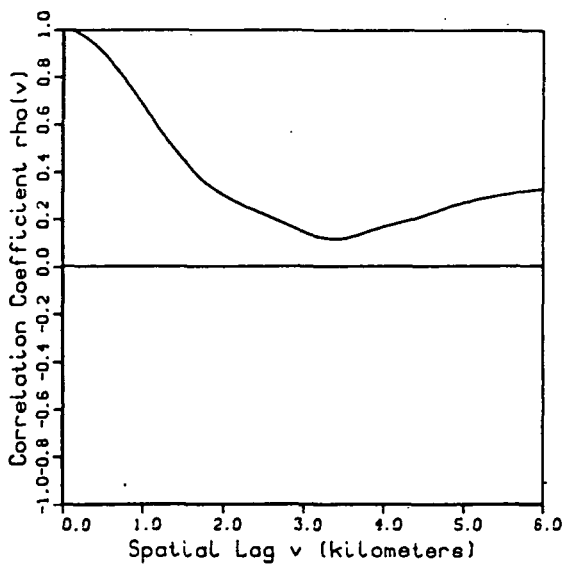
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.964	0.04	1.022
		0.4	0.867	0.16	1.024
		0.6	0.734	0.36	1.007
		0.8	0.586	0.64	0.975
		1.0	0.442	1.00	0.934
		1.2	0.314	1.44	0.888
		1.4	0.210	1.96	0.838
		1.6	0.131	2.56	0.784
		1.8	0.074	3.24	0.731
		2.0	0.034	4.00	0.676
		2.2	0.008	4.84	0.623
		2.4	-.010	5.76	0.571
		2.6	-.020	6.76	0.520
		2.8	-.027	7.84	0.473
		3.0	-.030	9.00	0.429
		3.2	-.032	10.24	0.389
		3.4	-.033	11.56	0.352
		3.6	-.033	12.96	0.318
		3.8	-.034	14.44	0.286
		4.0	-.034	16.00	0.256
		4.2	-.035	17.64	0.228
		4.4	-.035	19.36	0.200
		4.6	-.035	21.16	0.174
		4.8	-.035	23.04	0.147
		5.0	-.034	25.00	0.121
		5.2	-.033	27.04	0.094
		5.4	-.031	29.16	0.068
		5.6	-.030	31.36	0.043
		5.8	-.028	33.64	0.015
		6.0	-.027	36.00	0.003

Walnut Gulch, Arizona
Ac=154.21 sq.km.

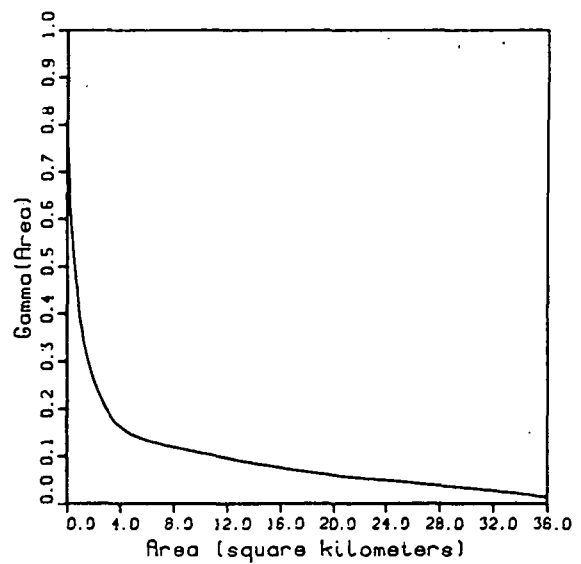
Storm Day
Aug 22, 1977



Spatial Correlation



Variance Function



Storm Day Aug 22 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.791$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.209$

Expected Value of Point Depth (mm.): $E(Y) = 0.086$

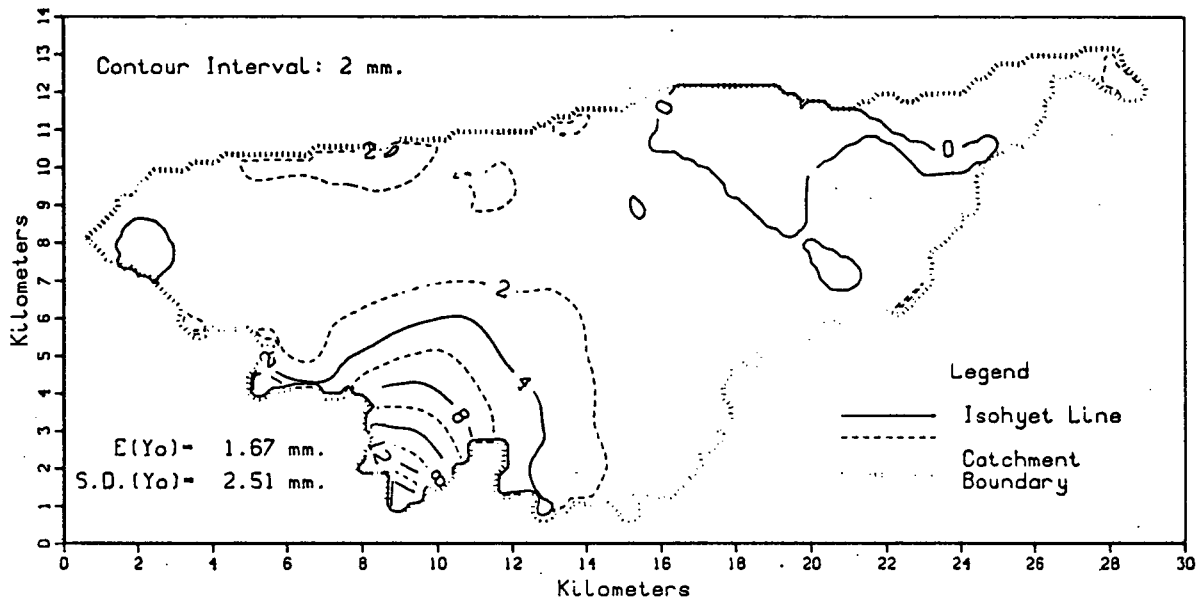
Variance of Point Depth (mm. sq.): $Var(Y) = 0.071$

Coef. of Skewness of Point Depth: $S.C.(Y) = 4.103$

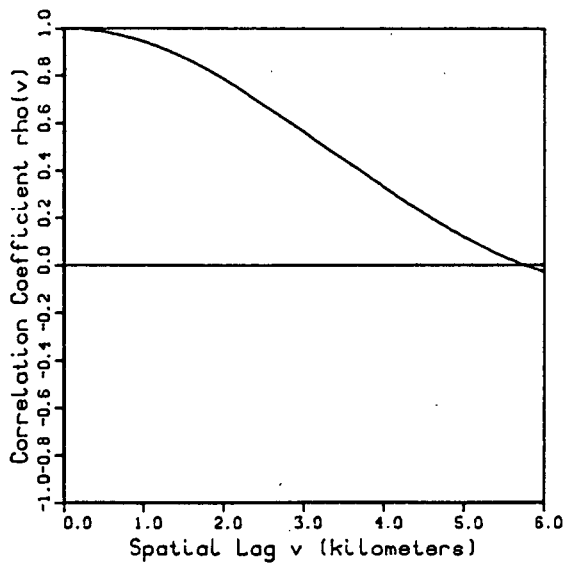
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.026	0.0	1.000	0.00	1.000
2	0.000	0.2	0.984	0.04	0.836
3	0.000	0.4	0.937	0.16	0.695
		0.6	0.865	0.36	0.581
		0.8	0.779	0.64	0.482
		1.0	0.684	1.00	0.392
		1.2	0.588	1.44	0.322
		1.4	0.496	1.96	0.268
		1.6	0.415	2.56	0.222
		1.8	0.348	3.24	0.184
		2.0	0.303	4.00	0.162
		2.2	0.265	4.84	0.145
		2.4	0.235	5.76	0.134
		2.6	0.207	6.76	0.126
		2.8	0.175	7.84	0.119
		3.0	0.146	9.00	0.112
		3.2	0.123	10.24	0.105
		3.4	0.116	11.56	0.097
		3.6	0.127	12.96	0.089
		3.8	0.148	14.44	0.082
		4.0	0.169	16.00	0.074
		4.2	0.187	17.64	0.067
		4.4	0.206	19.36	0.061
		4.6	0.229	21.16	0.055
		4.8	0.251	23.04	0.050
		5.0	0.271	25.00	0.045
		5.2	0.287	27.04	0.040
		5.4	0.300	29.16	0.034
		5.6	0.311	31.36	0.028
		5.8	0.321	33.64	0.021
		6.0	0.328	36.00	0.011

Walnut Gulch, Arizona
Ac=154.21 sq.km.

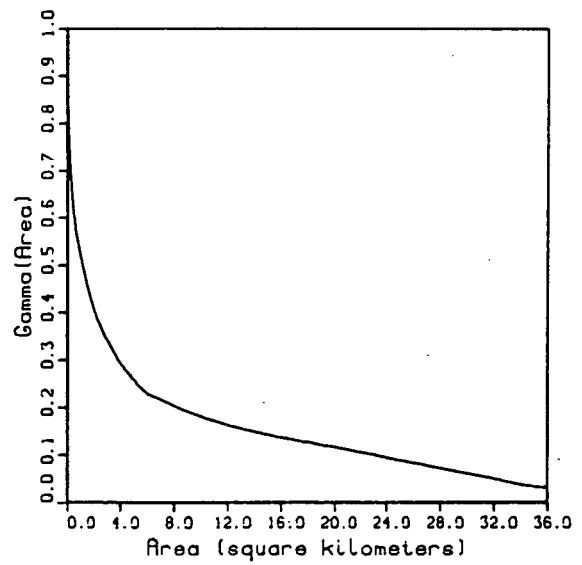
Storm Day
Aug 23, 1977



Spatial Correlation



Variance Function



Storm Day Aug 23 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.091$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.909$

Expected Value of Point Depth (mm.): $E(Y) = 1.866$

Variance of Point Depth (mm. sq.): $Var(Y) = 7.682$

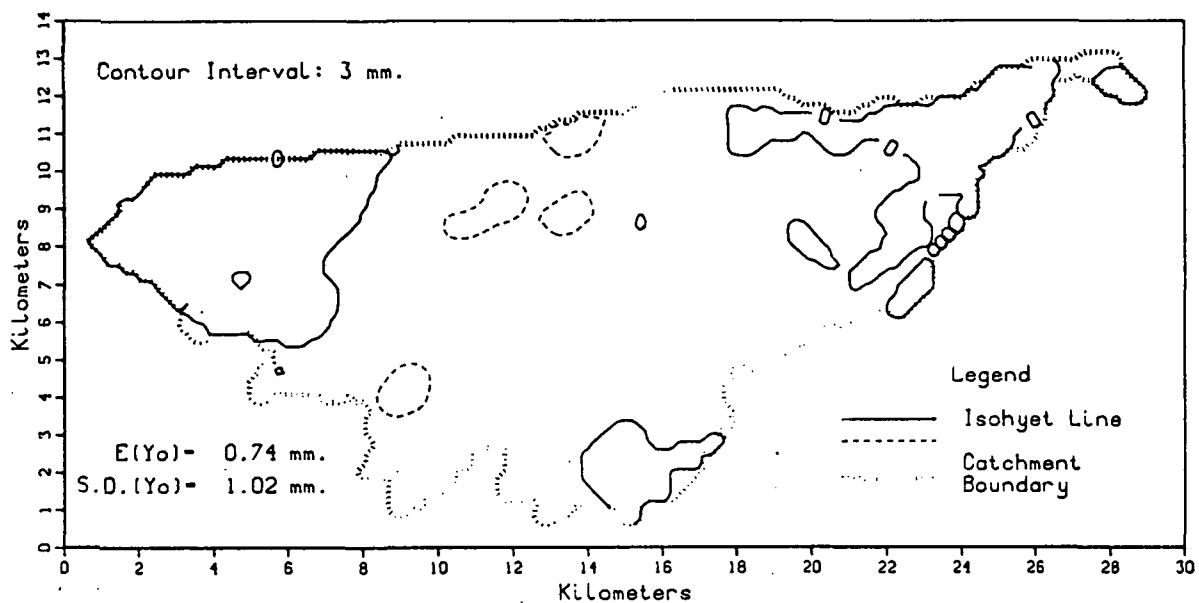
Coef. of Skewness of Point Depth: $S.C.(Y) = 3.511$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.517	0.0	1.000	0.00	1.000
2	0.243	0.2	0.997	0.04	0.865
3	0.159	0.4	0.989	0.16	0.747
4	0.104	0.6	0.977	0.36	0.653
5	0.076	0.8	0.961	0.64	0.574
6	0.058	1.0	0.942	1.00	0.519
7	0.046	1.2	0.918	1.44	0.466
8	0.037	1.4	0.890	1.96	0.412
9	0.030	1.6	0.858	2.56	0.367
10	0.025	1.8	0.824	3.24	0.329
11	0.020	2.0	0.785	4.00	0.292
12	0.015	2.2	0.742	4.84	0.262
13	0.012	2.4	0.697	5.76	0.233
14	0.009	2.6	0.652	6.76	0.218
15	0.007	2.8	0.609	7.84	0.204
16	0.005	3.0	0.562	9.00	0.190
17	0.004	3.2	0.515	10.24	0.177
18	0.003	3.4	0.468	11.56	0.165
19	0.002	3.6	0.423	12.96	0.155
20	0.001	3.8	0.377	14.44	0.144
21	0.001	4.0	0.329	16.00	0.135
22	0.000	4.2	0.282	17.64	0.127
23	0.000	4.4	0.237	19.36	0.118
24	0.000	4.6	0.195	21.16	0.109
		4.8	0.155	23.04	0.099
		5.0	0.117	25.00	0.087
		5.2	0.081	27.04	0.077
		5.4	0.049	29.16	0.065
		5.6	0.018	31.36	0.053
		5.8	-.009	33.64	0.039
		6.0	-.029	36.00	0.031

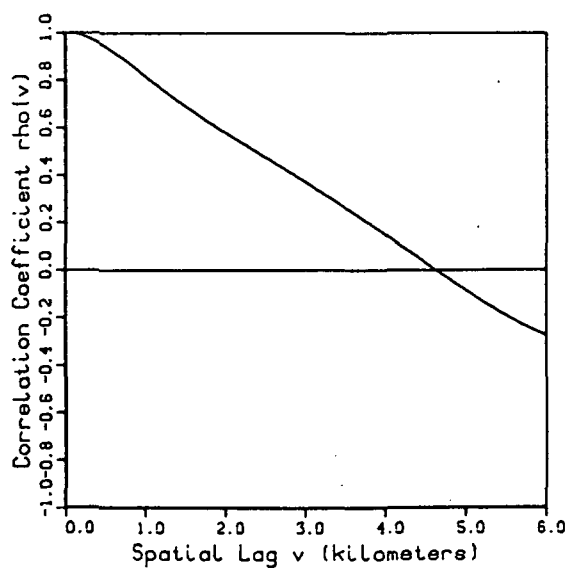
Walnut Gulch, Arizona

Ac=154.21 sq.km.

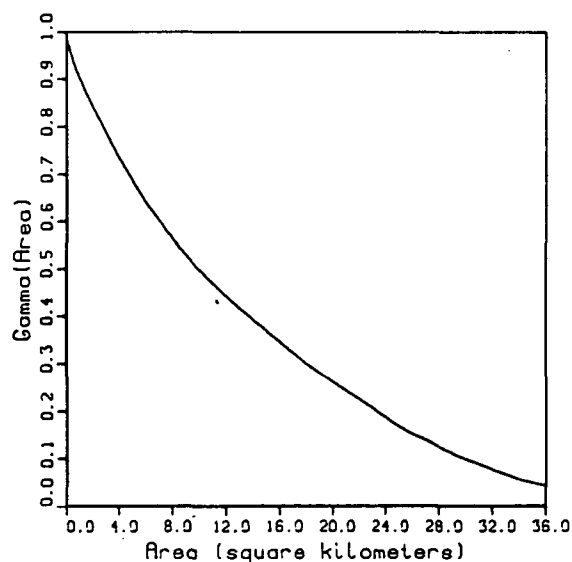
Storm Day
Aug 24, 1977



Spatial Correlation



Variance Function



Storm Day Aug 24 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c) = 0.250$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c) = 0.750$

Expected Value of Point Depth (mm.): $E(Y) = 0.780$

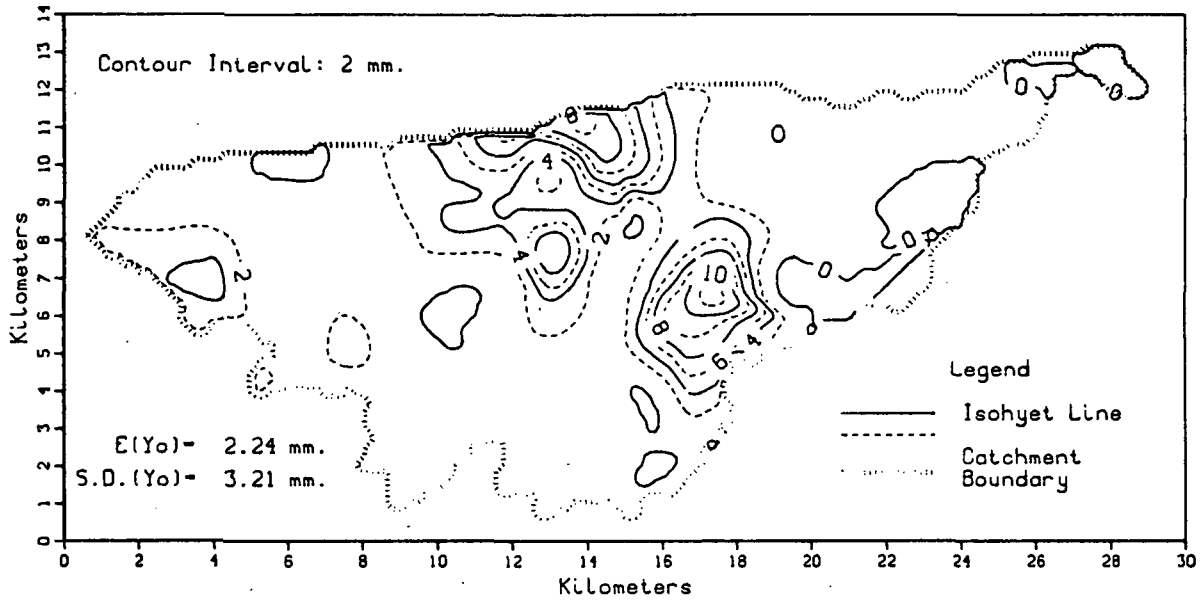
Variance of Point Depth (mm. sq.): $Var(Y) = 0.850$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.383$

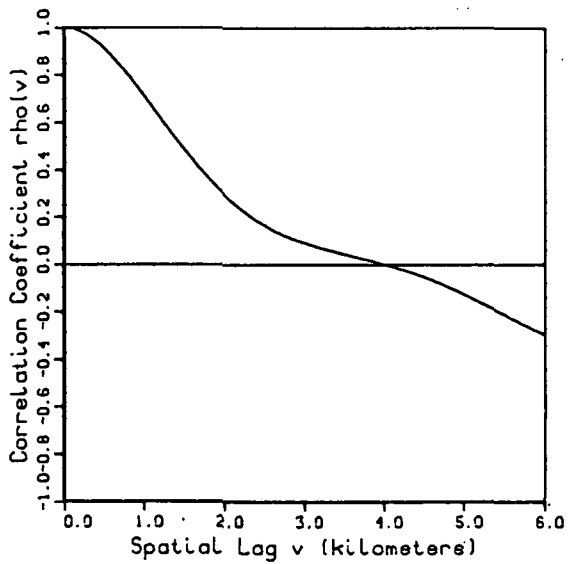
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km. sq.) Gamma (A)	
1	0.308	0.0	1.000	0.00	1.000
2	0.124	0.2	0.989	0.04	0.991
3	0.035	0.4	0.961	0.16	0.975
4	0.004	0.6	0.919	0.36	0.953
5	0.001	0.8	0.869	0.64	0.929
6	0.000	1.0	0.816	1.00	0.903
		1.2	0.763	1.44	0.875
		1.4	0.712	1.96	0.845
		1.6	0.664	2.56	0.811
		1.8	0.619	3.24	0.774
		2.0	0.576	4.00	0.734
		2.2	0.535	4.84	0.693
		2.4	0.494	5.76	0.650
		2.6	0.453	6.76	0.609
		2.8	0.412	7.84	0.568
		3.0	0.369	9.00	0.528
		3.2	0.326	10.24	0.490
		3.4	0.283	11.56	0.453
		3.6	0.239	12.96	0.417
		3.8	0.194	14.44	0.382
		4.0	0.148	16.00	0.345
		4.2	0.101	17.64	0.307
		4.4	0.053	19.36	0.272
		4.6	0.006	21.16	0.240
		4.8	-.042	23.04	0.205
		5.0	-.088	25.00	0.166
		5.2	-.133	27.04	0.137
		5.4	-.176	29.16	0.107
		5.6	-.214	31.36	0.083
		5.8	-.249	33.64	0.059
		6.0	-.279	36.00	0.042

Walnut Gulch, Arizona
Ac=154.21 sq.km.

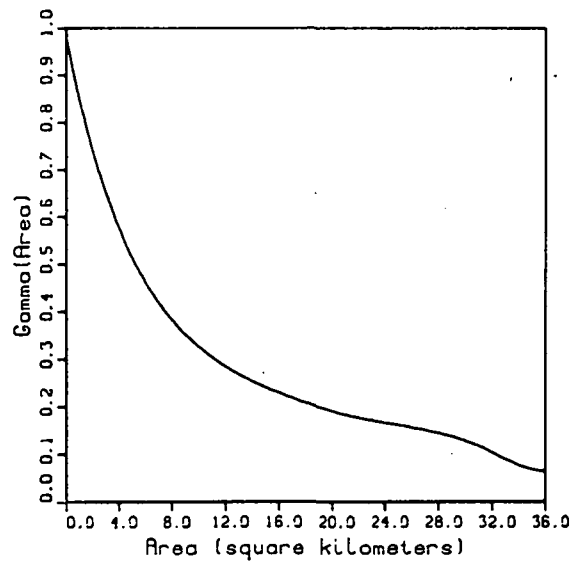
Storm Day
Aug 31, 1977



Spatial Correlation



Variance Function



Storm Day Aug 31 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.067$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.933$

Expected Value of Point Depth (mm.): $E(Y) = 2.130$

Variance of Point Depth (mm. sq.): $Var(Y) = 7.910$

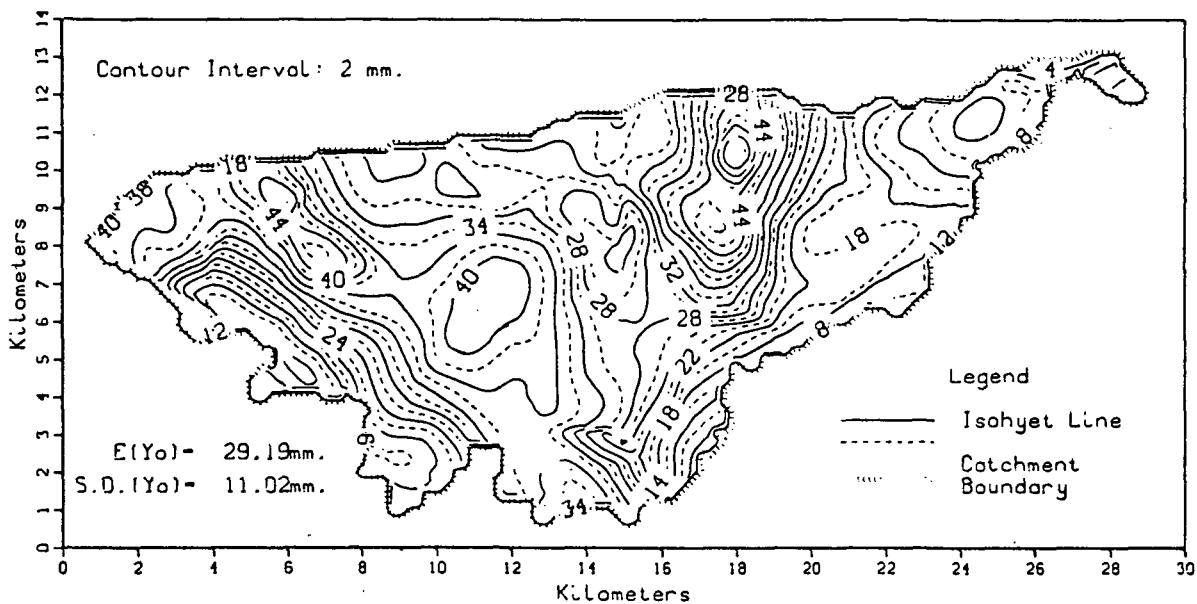
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.169$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.507	0.0	1.000	0.00	1.000
2	0.317	0.2	0.985	0.04	0.985
3	0.226	0.4	0.942	0.16	0.962
4	0.169	0.6	0.878	0.36	0.931
5	0.124	0.8	0.798	0.64	0.892
6	0.099	1.0	0.709	1.00	0.848
7	0.080	1.2	0.616	1.44	0.799
8	0.063	1.4	0.525	1.96	0.746
9	0.047	1.6	0.440	2.56	0.689
10	0.034	1.8	0.361	3.24	0.632
11	0.025	2.0	0.292	4.00	0.576
12	0.017	2.2	0.233	4.84	0.522
13	0.010	2.4	0.184	5.76	0.473
14	0.004	2.6	0.144	6.76	0.428
15	0.000	2.8	0.113	7.84	0.388
		3.0	0.088	9.00	0.352
		3.2	0.067	10.24	0.321
		3.4	0.049	11.56	0.293
		3.6	0.033	12.96	0.269
		3.8	0.016	14.44	0.247
		4.0	-.002	16.00	0.229
		4.2	-.021	17.64	0.211
		4.4	-.043	19.36	0.195
		4.6	-.068	21.16	0.181
		4.8	-.096	23.04	0.170
		5.0	-.128	25.00	0.160
		5.2	-.162	27.04	0.149
		5.4	-.198	29.16	0.135
		5.6	-.233	31.36	0.113
		5.8	-.268	33.64	0.081
		6.0	-.300	36.00	0.065

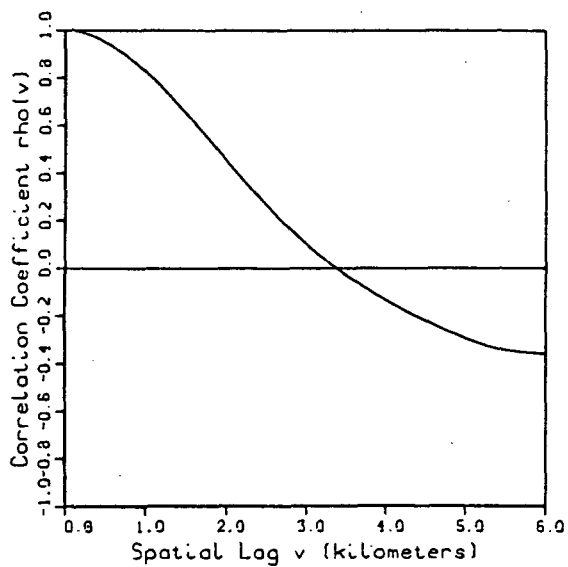
Walnut Gulch, Arizona

Ac=154.21 sq.km.

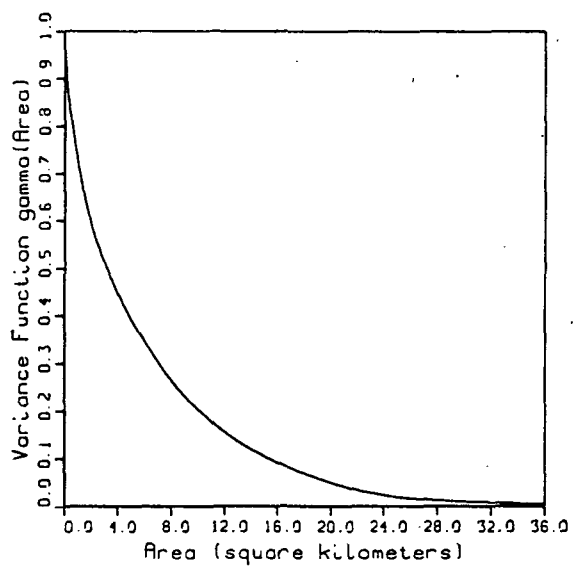
Storm Day
Sept 1, 1977



Spatial Correlation



Variance Function



Storm Day Sept 1 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 28.868$

Variance of Point Depth (mm. sq.): $Var(Y)=104.043$

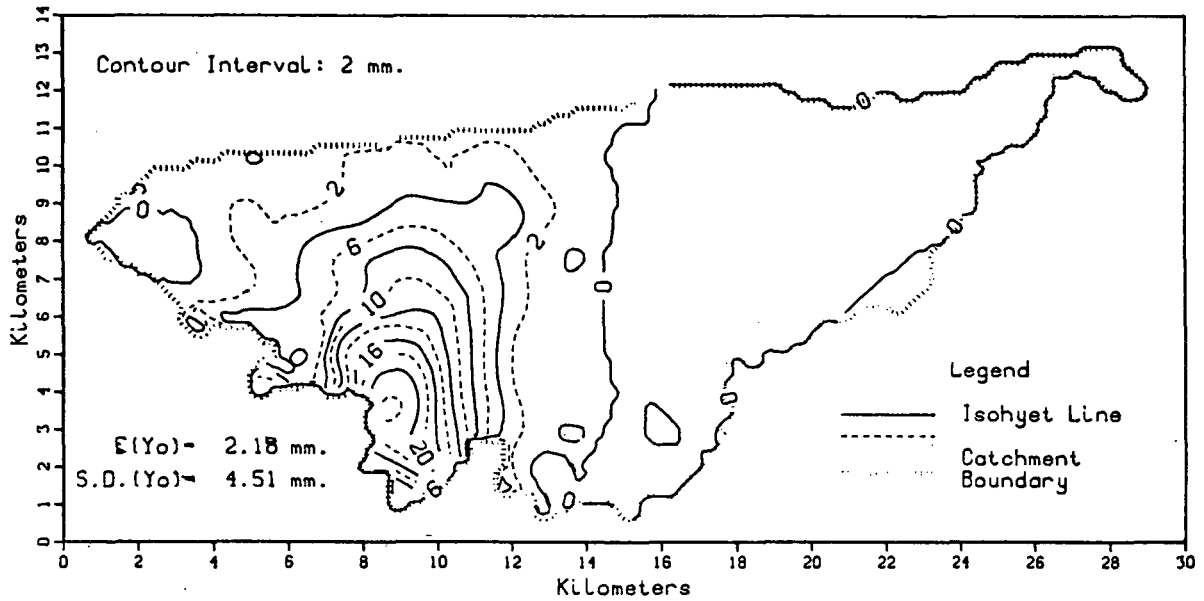
Coef. of Skewness of Point Depth: $S.C.(Y) = -0.210$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
3	0.999	0.2	0.991	0.04	0.952
5	0.998	0.4	0.966	0.16	0.900
7	0.996	0.6	0.929	0.36	0.843
9	0.979	0.8	0.882	0.64	0.786
11	0.958	1.0	0.825	1.00	0.723
13	0.929	1.2	0.761	1.44	0.656
15	0.897	1.4	0.690	1.96	0.593
17	0.851	1.6	0.613	2.56	0.541
19	0.793	1.8	0.535	3.24	0.493
21	0.744	2.0	0.455	4.00	0.446
23	0.711	2.2	0.377	4.84	0.400
25	0.675	2.4	0.301	5.76	0.356
27	0.630	2.6	0.229	6.76	0.311
29	0.551	2.8	0.162	7.84	0.269
31	0.476	3.0	0.100	9.00	0.231
33	0.403	3.2	0.044	10.24	0.196
35	0.319	3.4	-.007	11.56	0.164
37	0.231	3.6	-.053	12.96	0.136
39	0.160	3.8	-.096	14.44	0.112
41	0.105	4.0	-.136	16.00	0.091
43	0.061	4.2	-.172	17.64	0.072
45	0.038	4.4	-.207	19.36	0.055
47	0.017	4.6	-.240	21.16	0.039
49	0.010	4.8	-.270	23.04	0.028
51	0.007	5.0	-.299	25.00	0.019
53	0.005	5.2	-.324	27.04	0.014
55	0.004	5.4	-.342	29.16	0.010
57	0.002	5.6	-.353	31.36	0.008
59	0.001	5.8	-.360	33.64	0.005
		6.0	-.364	36.00	0.004

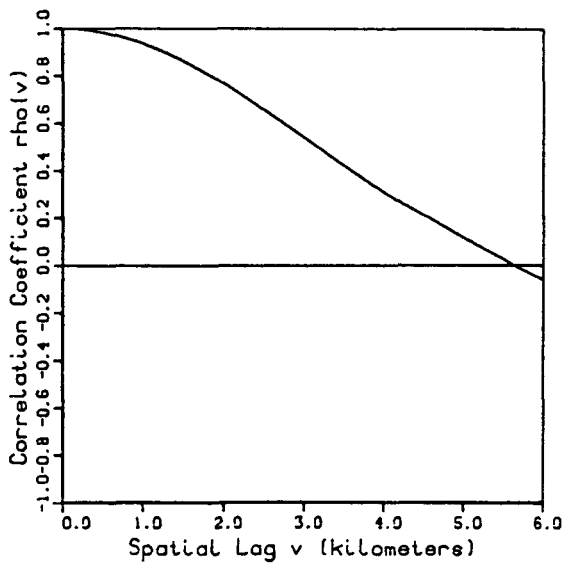
Walnut Gulch, Arizona

Ac=154.21 sq.km.

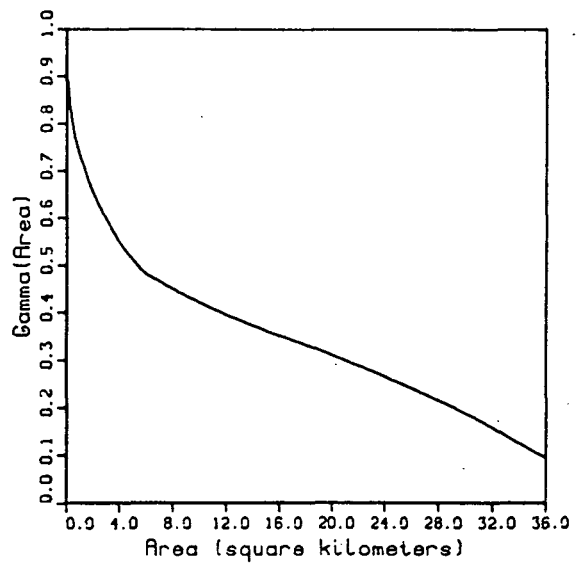
Storm Day
Sept 2 ,1977



Spatial Correlation



Variance Function



Storm Day Sept 2 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.451$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.549$

Expected Value of Point Depth (mm.): $E(Y) = 2.771$

Variance of Point Depth (mm. sq.): $Var(Y) = 26.234$

Coef. of Skewness of Point Depth: $S.C.(Y) = 2.576$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.)		Variance Function A (km.sq.)	
	$A_{cw}/A_c (Y \geq y)$		$\rho(v)$		$\Gamma(A)$
1	0.396	0.0	1.000	0.00	1.000
2	0.323	0.2	0.996	0.04	0.930
3	0.265	0.4	0.987	0.16	0.867
4	0.218	0.6	0.973	0.36	0.815
5	0.175	0.8	0.955	0.64	0.770
6	0.144	1.0	0.933	1.00	0.735
7	0.127	1.2	0.906	1.44	0.698
8	0.112	1.4	0.876	1.96	0.657
9	0.099	1.6	0.841	2.56	0.619
10	0.086	1.8	0.804	3.24	0.583
11	0.075	2.0	0.764	4.00	0.547
12	0.067	2.2	0.720	4.84	0.516
13	0.060	2.4	0.675	5.76	0.485
14	0.054	2.6	0.630	6.76	0.468
15	0.047	2.8	0.583	7.84	0.450
16	0.041	3.0	0.537	9.00	0.433
17	0.036	3.2	0.490	10.24	0.417
18	0.031	3.4	0.443	11.56	0.400
19	0.026	3.6	0.396	12.96	0.383
20	0.021	3.8	0.350	14.44	0.367
21	0.016	4.0	0.307	16.00	0.351
22	0.008	4.2	0.265	17.64	0.335
23	0.005	4.4	0.228	19.36	0.317
24	0.004	4.6	0.191	21.16	0.297
25	0.003	4.8	0.152	23.04	0.276
26	0.002	5.0	0.114	25.00	0.252
27	0.002	5.2	0.077	27.04	0.227
28	0.001	5.4	0.041	29.16	0.199
29	0.001	5.6	0.004	31.36	0.168
30	0.001	5.8	-0.032	33.64	0.130
31	0.000	6.0	-0.063	36.00	0.095
32	0.000				
33	0.000				
34	0.000				
35	0.000				

Storm Day Sept 4 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.057$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.943$

Expected Value of Point Depth (mm.): $E(Y) = 2.148$

Variance of Point Depth (mm. sq.): $Var(Y) = 3.858$

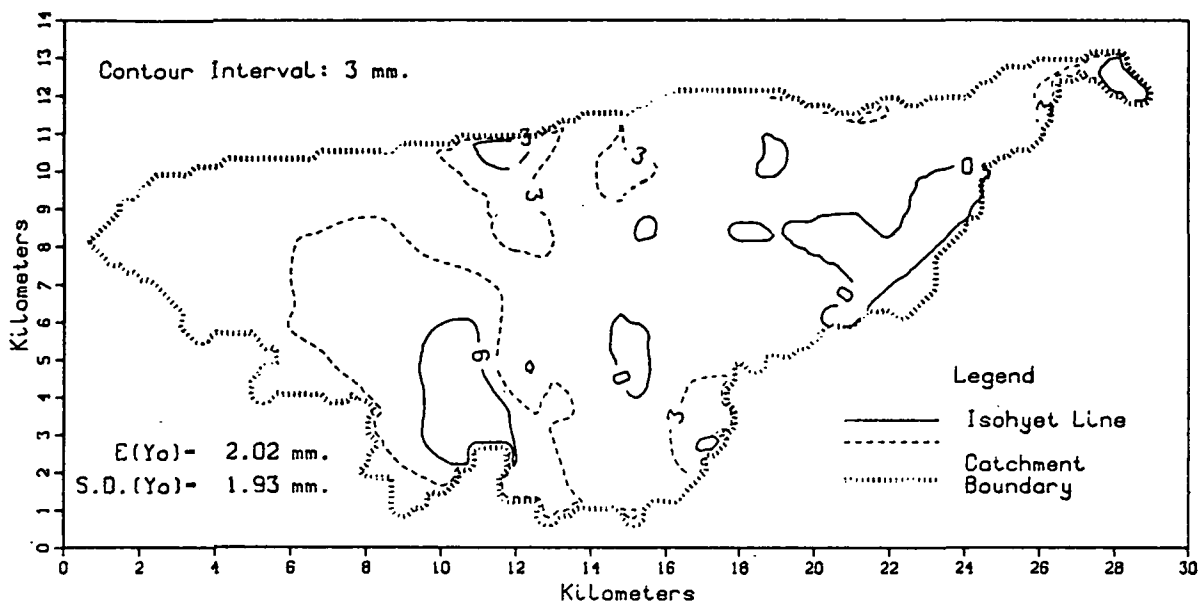
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.185$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.619	0.0	1.000	0.00	1.000
2	0.436	0.2	0.988	0.04	0.968
3	0.263	0.4	0.956	0.16	0.933
4	0.166	0.6	0.908	0.36	0.909
5	0.104	0.8	0.851	0.64	0.889
6	0.051	1.0	0.788	1.00	0.865
7	0.031	1.2	0.726	1.44	0.841
8	0.012	1.4	0.666	1.96	0.815
9	0.002	1.6	0.612	2.56	0.787
10	0.001	1.8	0.562	3.24	0.759
11	0.000	2.0	0.515	4.00	0.730
12	0.000	2.2	0.470	4.84	0.700
		2.4	0.425	5.76	0.669
		2.6	0.380	6.76	0.642
		2.8	0.334	7.84	0.614
		3.0	0.288	9.00	0.586
		3.2	0.242	10.24	0.558
		3.4	0.197	11.56	0.530
		3.6	0.153	12.96	0.502
		3.8	0.112	14.44	0.475
		4.0	0.075	16.00	0.449
		4.2	0.043	17.64	0.422
		4.4	0.017	19.36	0.393
		4.6	-0.005	21.16	0.361
		4.8	-0.024	23.04	0.326
		5.0	-0.036	25.00	0.286
		5.2	-0.041	27.04	0.248
		5.4	-0.042	29.16	0.206
		5.6	-0.039	31.36	0.165
		5.8	-0.034	33.64	0.115
		6.0	-0.026	36.00	0.078

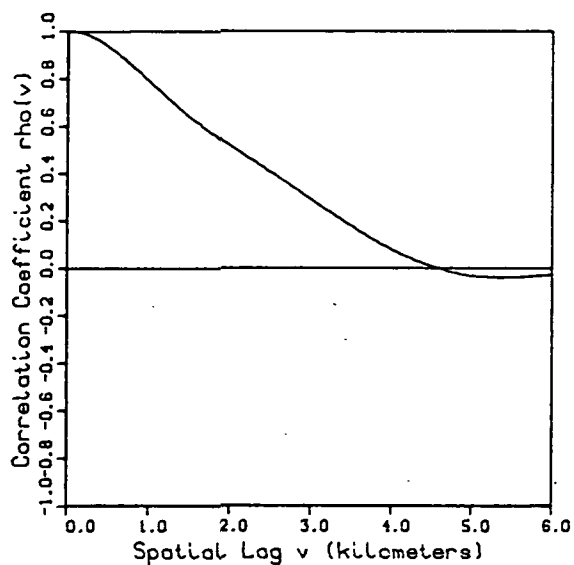
Walnut Gulch, Arizona

Ac=154.21 sq.km.

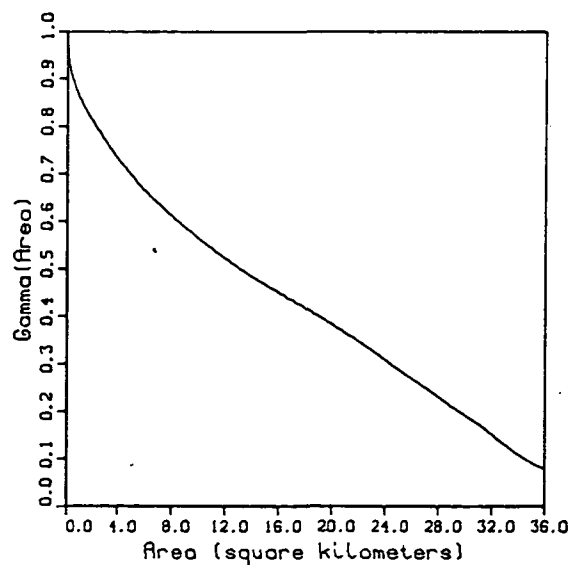
Storm Day
Sept 4, 1977



Spatial Correlation



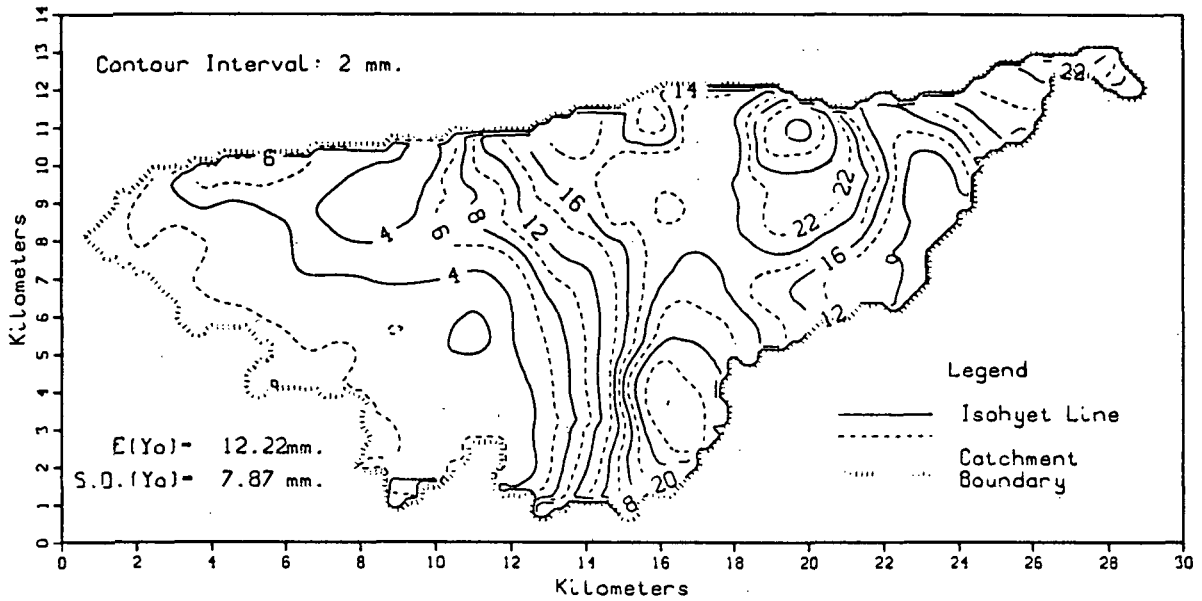
Variance Function



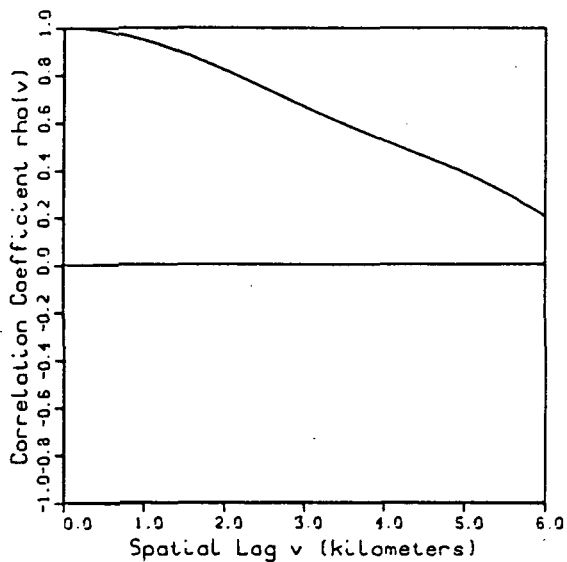
Walnut Gulch, Arizona

Ac=154.21 sq.km.

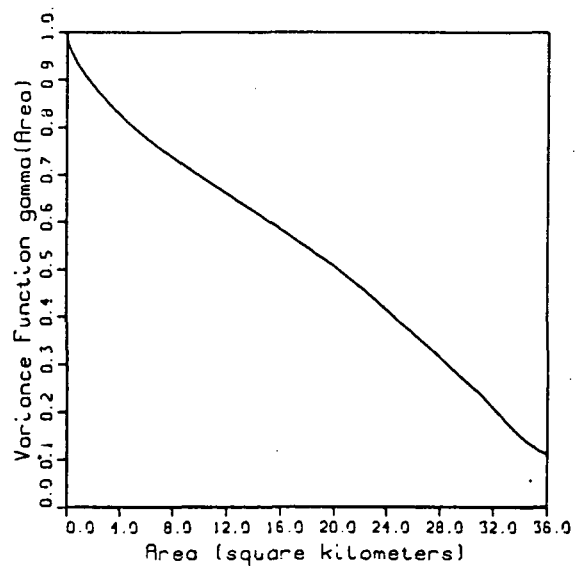
Storm Day
Sept 5, 1977



Spatial Correlation



Variance Function



Storm Day Sept 5 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 11.748$

Variance of Point Depth (mm. sq.): $Var(Y) = 63.639$

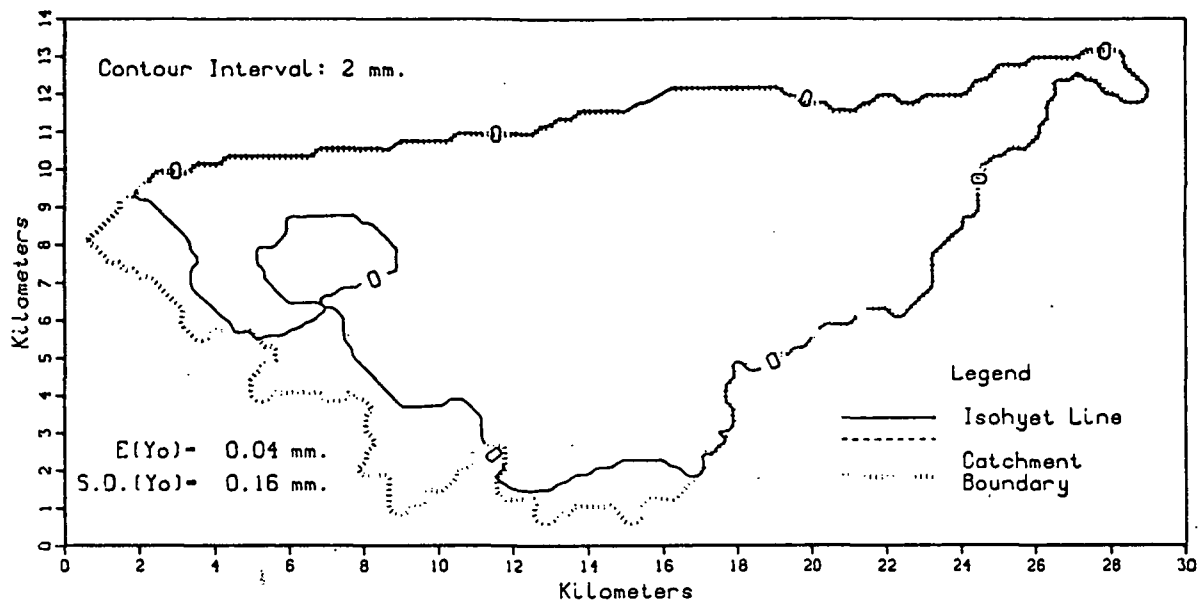
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.226$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho(v)		Variance Function A (km.sq.) Gamma(A)	
Acw/Ac ($Y \geq y$)					
1	0.999	0.0	1.000	0.00	1.000
2	0.949	0.2	0.997	0.04	0.988
3	0.832	0.4	0.990	0.16	0.973
4	0.723	0.6	0.978	0.36	0.958
5	0.648	0.8	0.963	0.64	0.943
6	0.616	1.0	0.945	1.00	0.926
7	0.592	1.2	0.924	1.44	0.907
8	0.572	1.4	0.900	1.96	0.888
9	0.557	1.6	0.875	2.56	0.869
10	0.542	1.8	0.847	3.24	0.847
11	0.523	2.0	0.818	4.00	0.825
12	0.488	2.2	0.788	4.84	0.803
13	0.458	2.4	0.757	5.76	0.781
14	0.428	2.6	0.727	6.76	0.759
15	0.400	2.8	0.696	7.84	0.737
16	0.370	3.0	0.665	9.00	0.714
17	0.340	3.2	0.635	10.24	0.690
18	0.301	3.4	0.605	11.56	0.666
19	0.244	3.6	0.577	12.96	0.640
20	0.180	3.8	0.549	14.44	0.613
21	0.146	4.0	0.522	16.00	0.583
22	0.119	4.2	0.495	17.64	0.552
23	0.088	4.4	0.468	19.36	0.518
24	0.062	4.6	0.442	21.16	0.482
25	0.045	4.8	0.415	23.04	0.439
26	0.028	5.0	0.387	25.00	0.388
27	0.013	5.2	0.355	27.04	0.338
28	0.002	5.4	0.320	29.16	0.282
29	0.000	5.6	0.283	31.36	0.227
		5.8	0.244	33.64	0.158
		6.0	0.202	36.00	0.111

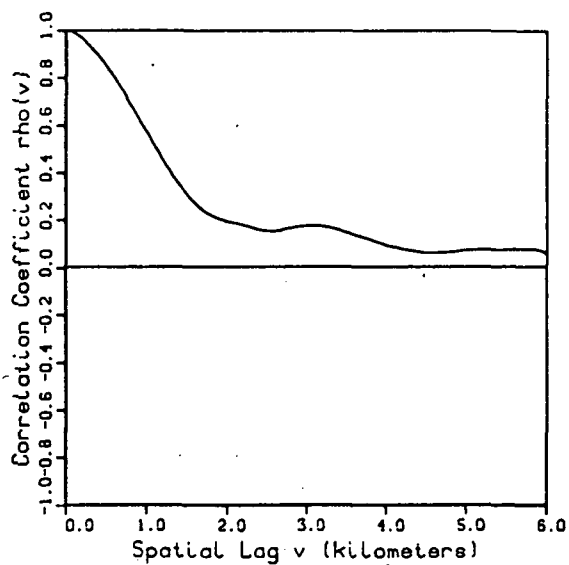
Walnut Gulch, Arizona

Ac=154.21 sq.km.

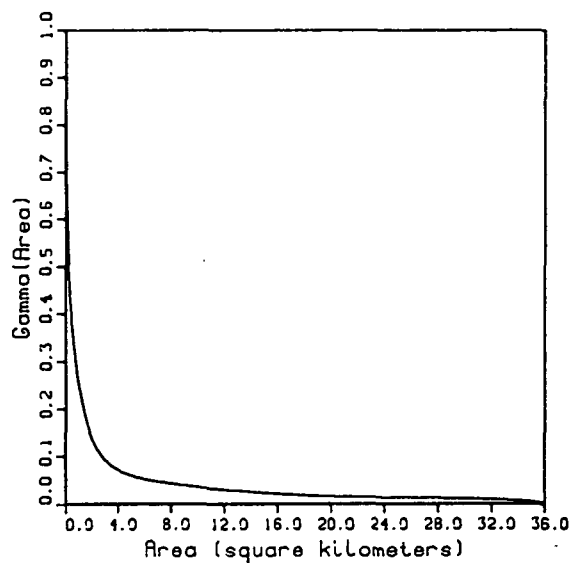
Storm Day
Sept 10, 1977



Spatial Correlation



Variance Function



Storm Day Sept 10 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.834$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.166$

Expected Value of Point Depth (mm.): $E(Y) = 0.039$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.015$

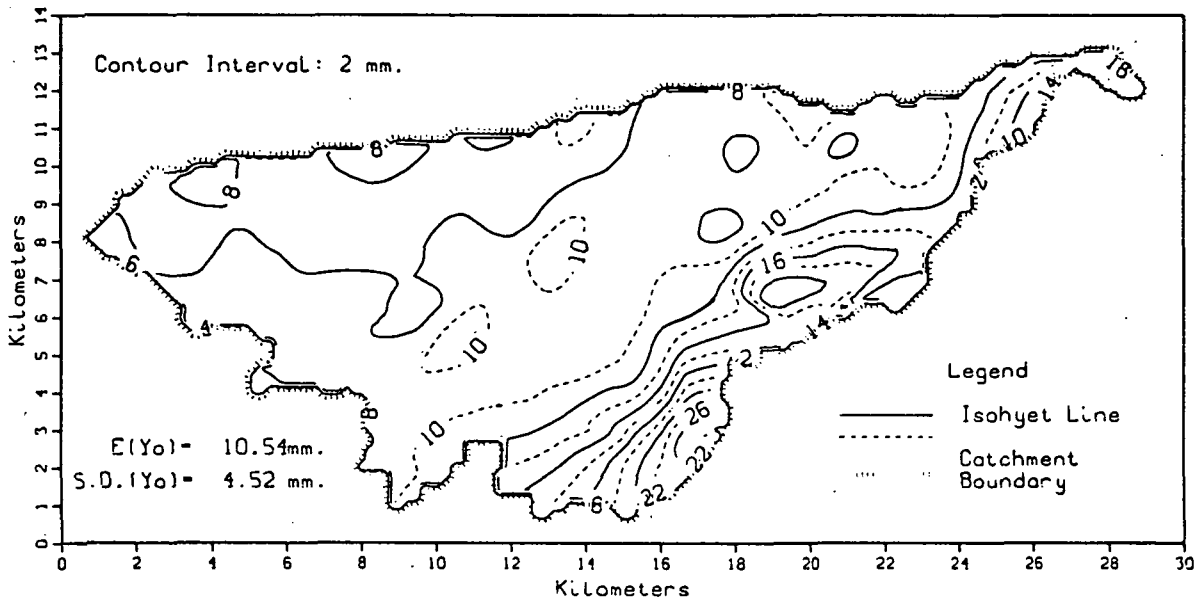
Coef. of Skewness of Point Depth: $S.C.(Y) = 4.392$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.001	0.0	1.000	0.00	1.000
2	0.000	0.2	0.967	0.04	0.782
		0.4	0.894	0.16	0.588
		0.6	0.802	0.36	0.436
		0.8	0.691	0.64	0.335
		1.0	0.574	1.00	0.255
		1.2	0.458	1.44	0.191
		1.4	0.352	1.96	0.143
		1.6	0.270	2.56	0.109
		1.8	0.217	3.24	0.086
		2.0	0.191	4.00	0.071
		2.2	0.176	4.84	0.060
		2.4	0.156	5.76	0.053
		2.6	0.152	6.76	0.047
		2.8	0.168	7.84	0.042
		3.0	0.175	9.00	0.038
		3.2	0.172	10.24	0.034
		3.4	0.155	11.56	0.030
		3.6	0.135	12.96	0.027
		3.8	0.113	14.44	0.023
		4.0	0.091	16.00	0.020
		4.2	0.076	17.64	0.018
		4.4	0.063	19.36	0.016
		4.6	0.059	21.16	0.014
		4.8	0.066	23.04	0.013
		5.0	0.072	25.00	0.012
		5.2	0.075	27.04	0.012
		5.4	0.072	29.16	0.010
		5.6	0.076	31.36	0.009
		5.8	0.076	33.64	0.006
		6.0	0.058	36.00	0.001

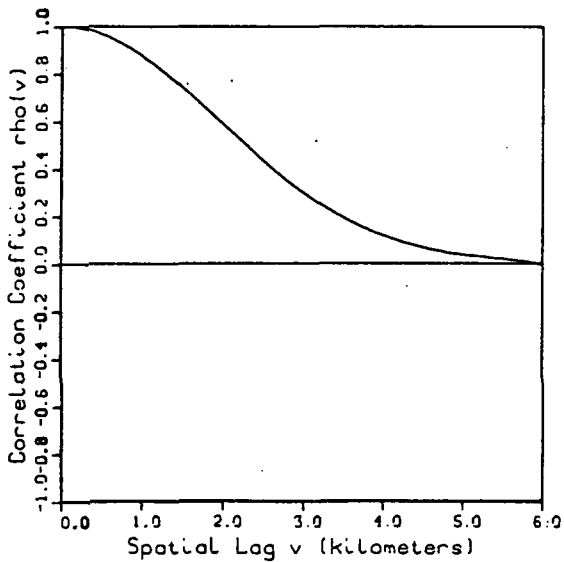
Walnut Gulch, Arizona

Ac=154.21 sq.km.

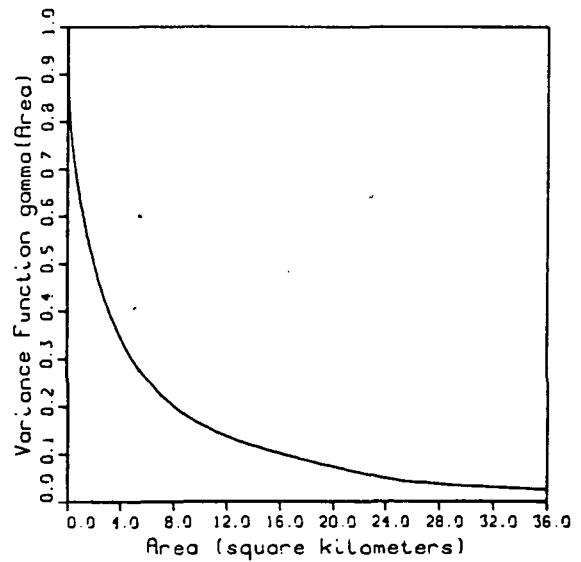
Storm Day
Sept 11, 1977



Spatial Correlation



Variance Function



Storm Day Sept 11 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 10.810$

Variance of Point Depth (mm. sq.): $Var(Y) = 18.235$

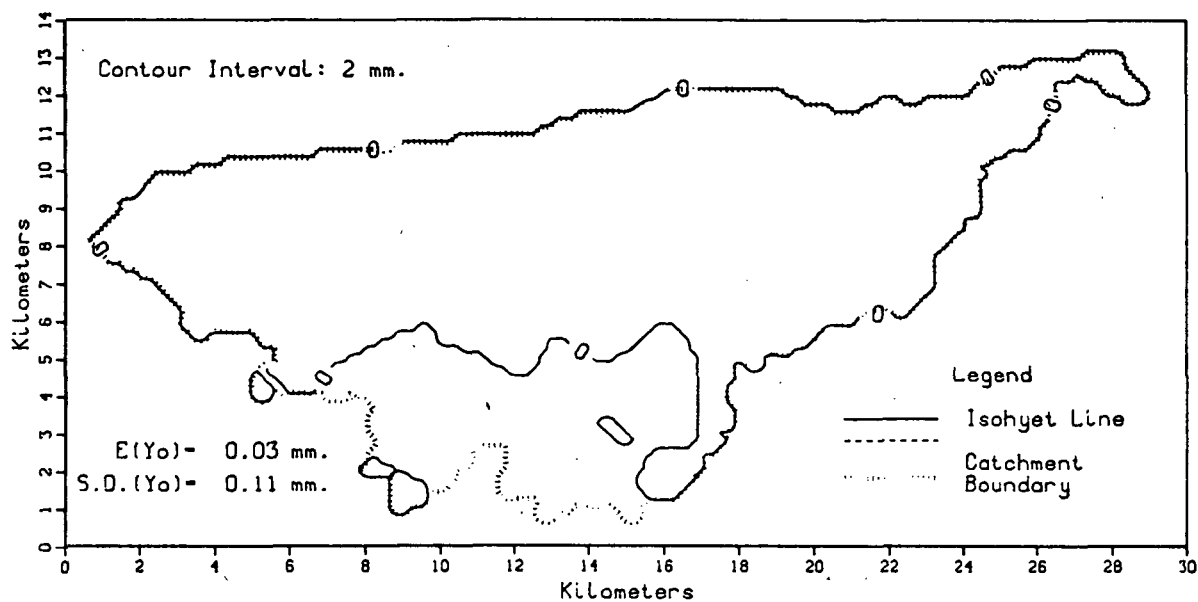
Coef. of Skewness of Point Depth: $S.C.(Y) = 1.949$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
2	1.000	0.2	0.994	0.04	0.917
3	1.000	0.4	0.977	0.16	0.835
4	1.000	0.6	0.951	0.36	0.764
5	1.000	0.8	0.916	0.64	0.700
6	0.996	1.0	0.873	1.00	0.636
7	0.949	1.2	0.823	1.44	0.571
8	0.793	1.4	0.769	1.96	0.509
9	0.585	1.6	0.710	2.56	0.450
10	0.348	1.8	0.649	3.24	0.395
11	0.262	2.0	0.587	4.00	0.346
12	0.224	2.2	0.525	4.84	0.303
13	0.196	2.4	0.463	5.76	0.265
14	0.170	2.6	0.403	6.76	0.231
15	0.146	2.8	0.348	7.84	0.203
16	0.121	3.0	0.298	9.00	0.179
17	0.096	3.2	0.252	10.24	0.159
18	0.075	3.4	0.211	11.56	0.141
19	0.060	3.6	0.175	12.96	0.126
20	0.047	3.8	0.144	14.44	0.112
21	0.037	4.0	0.117	16.00	0.100
22	0.031	4.2	0.094	17.64	0.088
23	0.026	4.4	0.074	19.36	0.076
24	0.021	4.6	0.058	21.16	0.065
25	0.017	4.8	0.045	23.04	0.054
26	0.013	5.0	0.034	25.00	0.043
27	0.008	5.2	0.028	27.04	0.038
28	0.005	5.4	0.021	29.16	0.033
29	0.003	5.6	0.014	31.36	0.031
30	0.001	5.8	0.005	33.64	0.028
31	0.000	6.0	-0.005	36.00	0.024

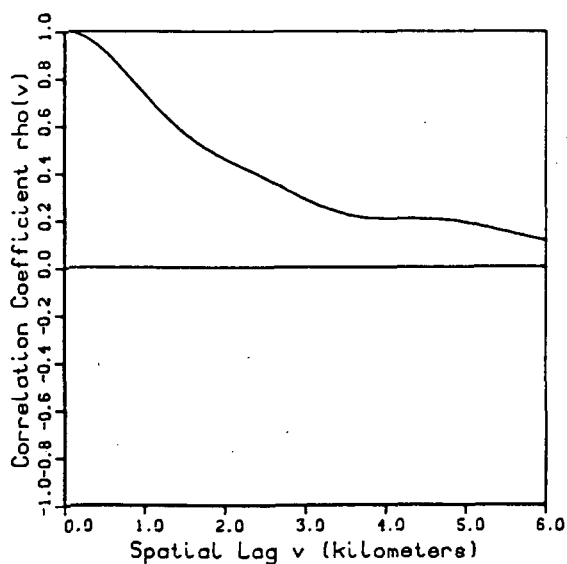
Walnut Gulch, Arizona

Ac=154.21 sq.km.

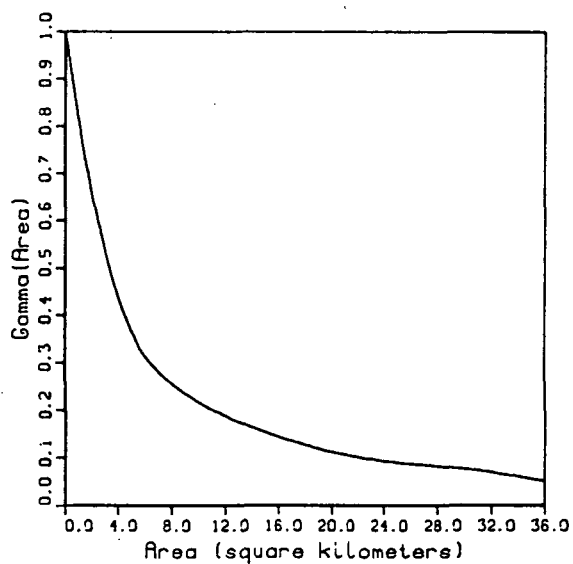
Storm Day
Sept 12, 1977



Spatial Correlation



Variance Function



Storm Day Sept 12 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.792$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.208$

Expected Value of Point Depth (mm.): $E(Y) = 0.045$

Variance of Point Depth (mm. sq.): $Var(Y) = 0.013$

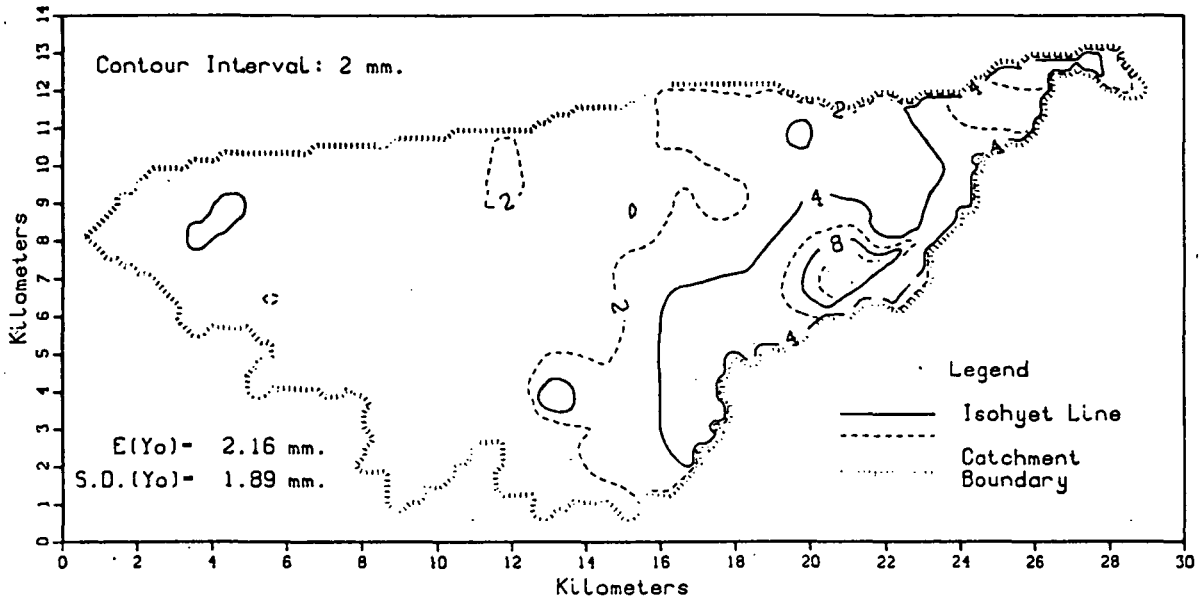
Coef. of Skewness of Point Depth: $S.C.(Y) = 2.776$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y>y)$		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
1	0.000	0.0	1.000	0.00	1.000
		0.2	0.985	0.04	0.997
		0.4	0.944	0.16	0.977
		0.6	0.884	0.36	0.938
		0.8	0.812	0.64	0.885
		1.0	0.735	1.00	0.821
		1.2	0.663	1.44	0.748
		1.4	0.597	1.96	0.669
		1.6	0.542	2.56	0.588
		1.8	0.496	3.24	0.510
		2.0	0.458	4.00	0.438
		2.2	0.425	4.84	0.377
		2.4	0.394	5.76	0.323
		2.6	0.360	6.76	0.288
		2.8	0.322	7.84	0.259
		3.0	0.288	9.00	0.234
		3.2	0.258	10.24	0.212
		3.4	0.233	11.56	0.193
		3.6	0.216	12.96	0.175
		3.8	0.207	14.44	0.158
		4.0	0.204	16.00	0.143
		4.2	0.204	17.64	0.129
		4.4	0.204	19.36	0.116
		4.6	0.202	21.16	0.105
		4.8	0.197	23.04	0.096
		5.0	0.187	25.00	0.089
		5.2	0.172	27.04	0.084
		5.4	0.156	29.16	0.079
		5.6	0.140	31.36	0.072
		5.8	0.126	33.64	0.061
		6.0	0.113	36.00	0.050

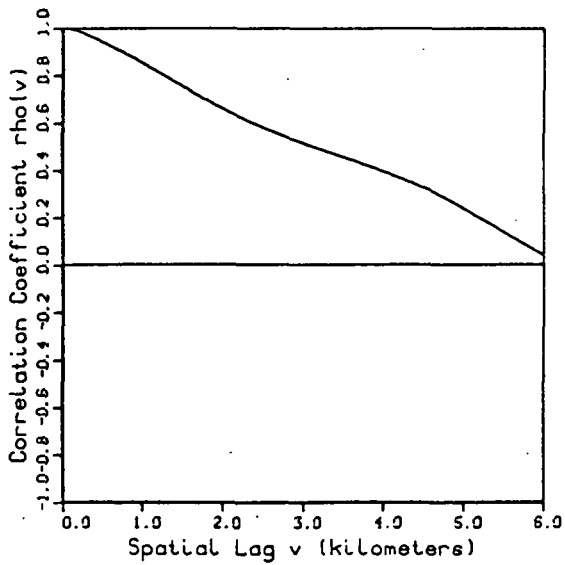
Walnut Gulch, Arizona

Ac=154.21 sq.km.

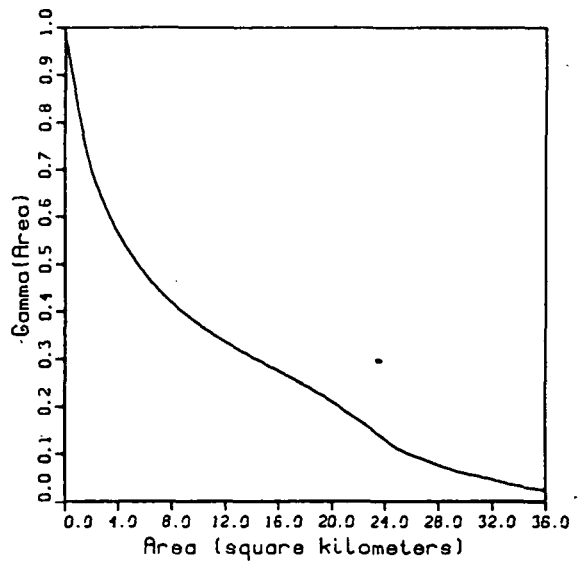
Storm Day
Sept 22, 1977



Spatial Correlation



Variance Function



Storm Day Sept 22 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.005$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.995$

Expected Value of Point Depth (mm.): $E(Y) = 2.303$

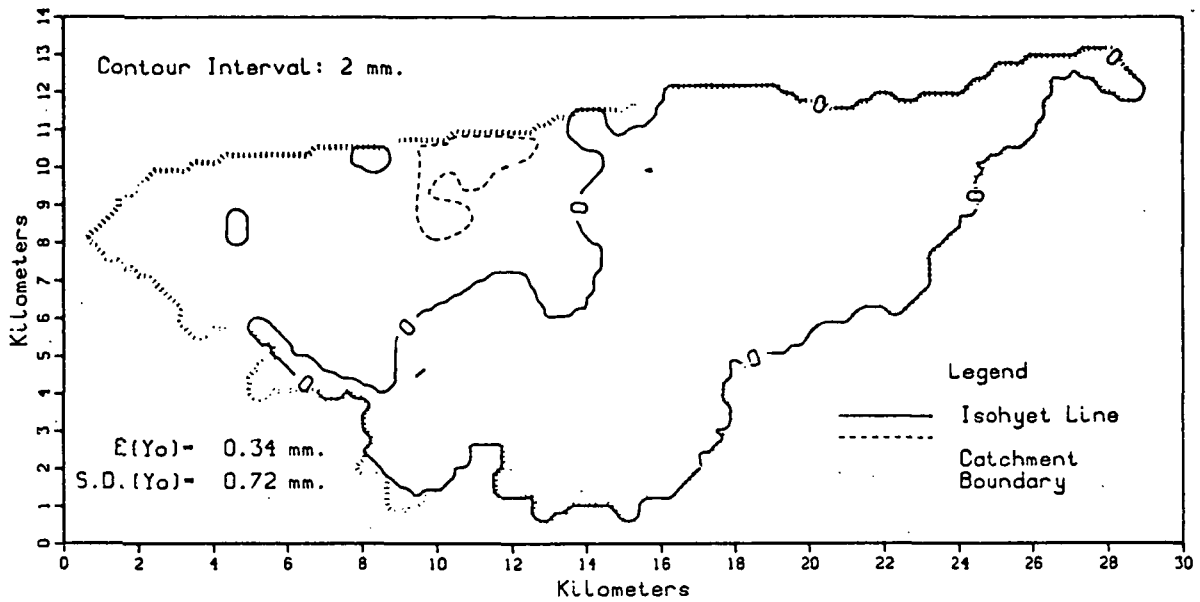
Variance of Point Depth (mm. sq.): $Var(Y) = 3.799$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.484$

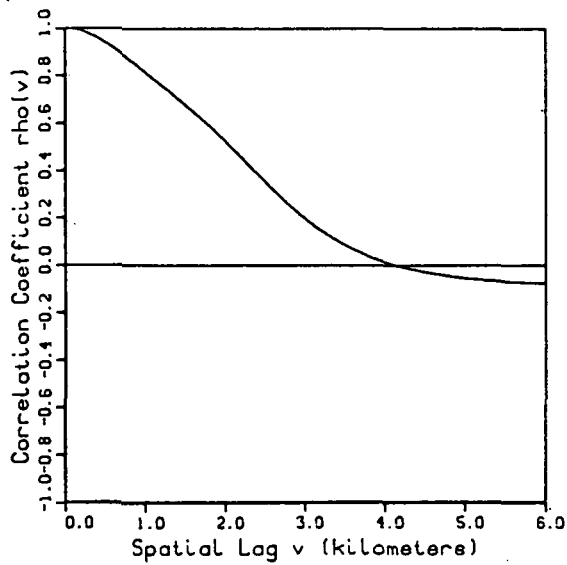
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	0.692	0.0	1.000	0.00	1.000
2	0.424	0.2	0.986	0.04	0.986
3	0.297	0.4	0.957	0.16	0.964
4	0.185	0.6	0.923	0.36	0.930
5	0.090	0.8	0.887	0.64	0.883
6	0.045	1.0	0.850	1.00	0.826
7	0.022	1.2	0.810	1.44	0.763
8	0.016	1.4	0.770	1.96	0.704
9	0.012	1.6	0.731	2.56	0.654
10	0.008	1.8	0.693	3.24	0.607
11	0.004	2.0	0.657	4.00	0.563
12	0.000	2.2	0.624	4.84	0.523
13	0.000	2.4	0.592	5.76	0.486
		2.6	0.564	6.76	0.452
		2.8	0.538	7.84	0.421
		3.0	0.513	9.00	0.393
		3.2	0.489	10.24	0.367
		3.4	0.466	11.56	0.342
		3.6	0.442	12.96	0.319
		3.8	0.418	14.44	0.297
		4.0	0.392	16.00	0.273
		4.2	0.366	17.64	0.248
		4.4	0.338	19.36	0.220
		4.6	0.309	21.16	0.188
		4.8	0.275	23.04	0.151
		5.0	0.237	25.00	0.109
		5.2	0.198	27.04	0.086
		5.4	0.157	29.16	0.064
		5.6	0.117	31.36	0.050
		5.8	0.079	33.64	0.034
		6.0	0.041	36.00	0.023

Walnut Gulch, Arizona
Ac=154.21 sq.km.

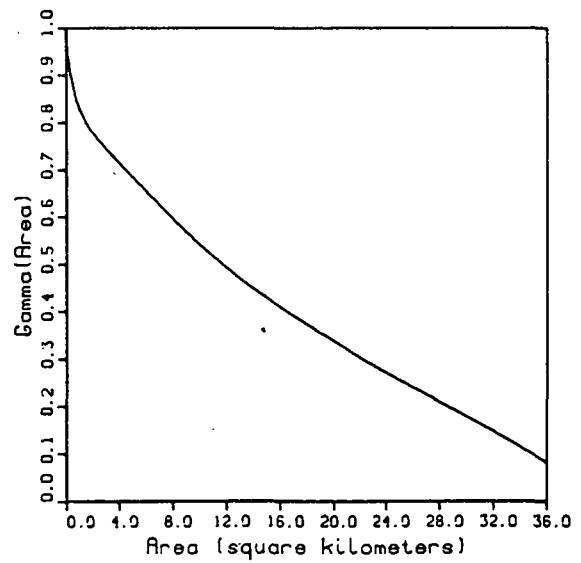
Storm Day
Sept 25, 1977



Spatial Correlation



Variance Function



Storm Day Sept 25 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.630$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.370$

Expected Value of Point Depth (mm.): $E(Y) = 0.276$

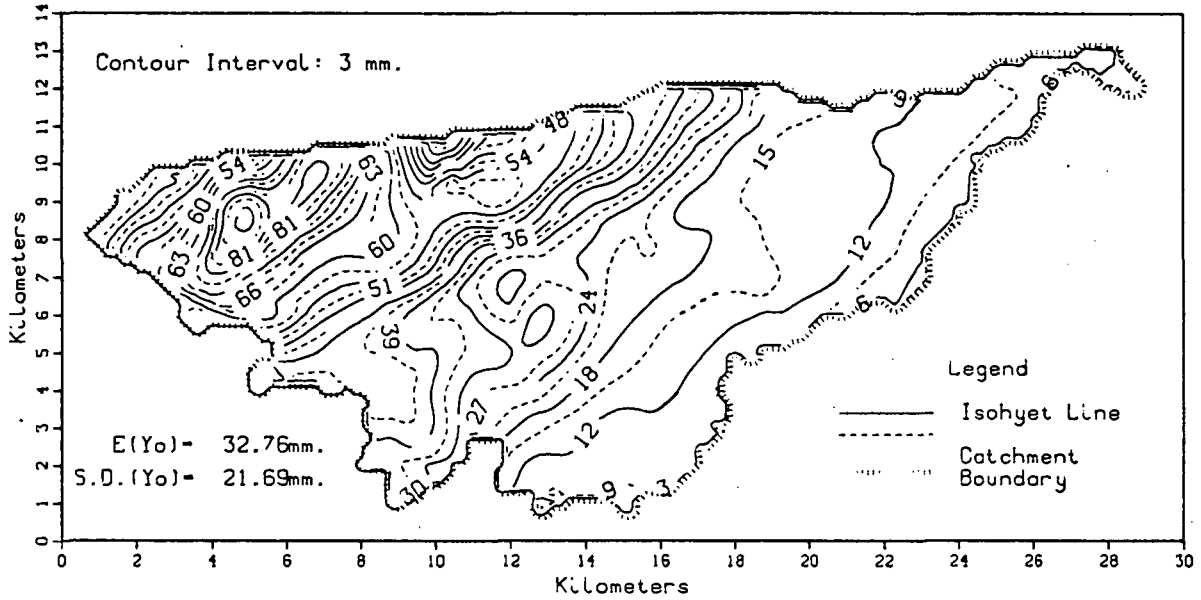
Variance of Point Depth (mm. sq.): $Var(Y) = 0.339$

Coef. of Skewness of Point Depth: $S.C.(Y) = 2.930$

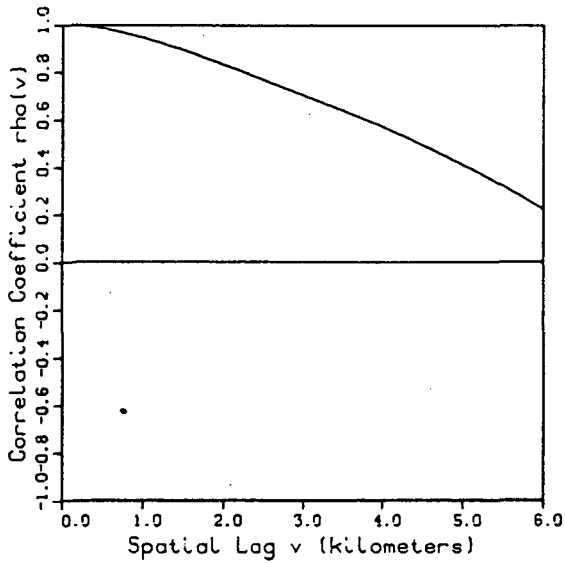
Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) $\Gamma(A)$	
1	0.103	0.0	1.000	0.00	1.000
2	0.028	0.2	0.989	0.04	0.967
3	0.008	0.4	0.960	0.16	0.932
4	0.000	0.6	0.918	0.36	0.895
		0.8	0.868	0.64	0.858
		1.0	0.814	1.00	0.827
		1.2	0.760	1.44	0.801
		1.4	0.704	1.96	0.778
		1.6	0.647	2.56	0.757
		1.8	0.587	3.24	0.736
		2.0	0.523	4.00	0.713
		2.2	0.455	4.84	0.688
		2.4	0.386	5.76	0.661
		2.6	0.319	6.76	0.631
		2.8	0.255	7.84	0.600
		3.0	0.198	9.00	0.568
		3.2	0.147	10.24	0.535
		3.4	0.104	11.56	0.503
		3.6	0.067	12.96	0.471
		3.8	0.036	14.44	0.439
		4.0	0.011	16.00	0.409
		4.2	-.008	17.64	0.379
		4.4	-.025	19.36	0.348
		4.6	-.038	21.16	0.317
		4.8	-.049	23.04	0.285
		5.0	-.058	25.00	0.254
		5.2	-.065	27.04	0.223
		5.4	-.071	29.16	0.191
		5.6	-.075	31.36	0.158
		5.8	-.078	33.64	0.120
		6.0	-.081	36.00	0.082

Walnut Gulch, Arizona
Ac=154.21 sq.km.

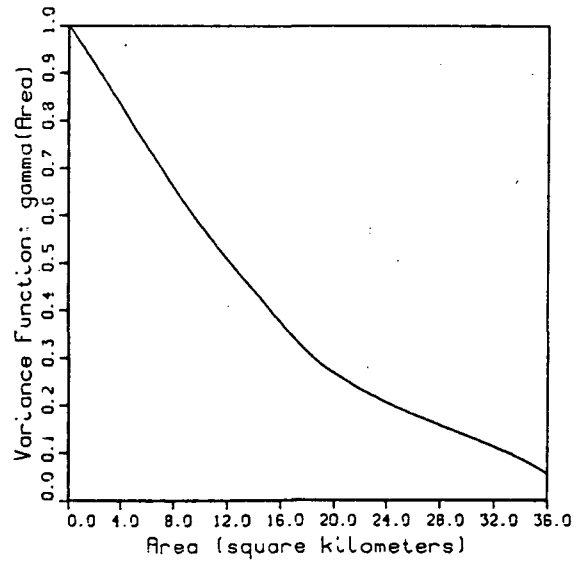
Storm Day
Sept 26, 1977



Spatial Correlation



Variance Function



Storm Day Sept 26 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.000$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=1.000$

Expected Value of Point Depth (mm.): $E(Y) = 31.468$

Variance of Point Depth (mm. sq.): $Var(Y) = 439.948$

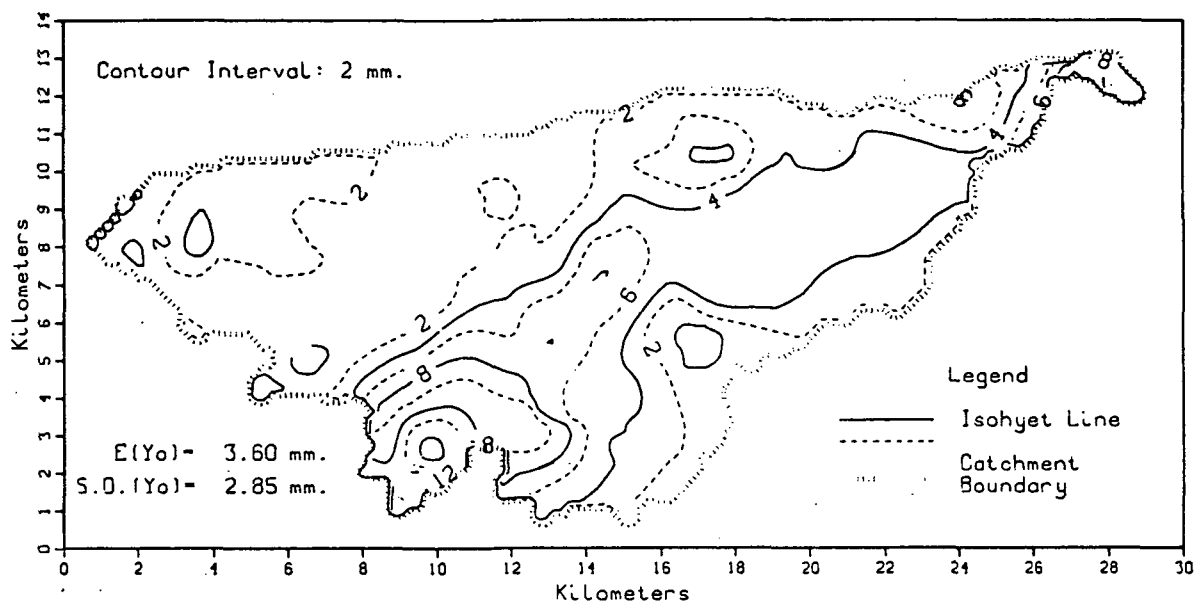
Coef. of Skewness of Point Depth: $S.C.(Y) = 0.829$

Spatial Distribution of Total Storm Depth y (mm.) $A_{cw}/A_c (Y \geq y)$		Spatial Correlation v (km.) $\rho(v)$		Variance Function A (km.sq.) Gamma (A)	
1	1.000	0.0	1.000	0.00	1.000
4	0.999	0.2	0.997	0.04	1.000
7	0.987	0.4	0.989	0.16	0.995
10	0.922	0.6	0.977	0.36	0.988
13	0.789	0.8	0.961	0.64	0.976
16	0.660	1.0	0.943	1.00	0.961
19	0.597	1.2	0.923	1.44	0.942
22	0.546	1.4	0.902	1.96	0.919
25	0.510	1.6	0.879	2.56	0.893
28	0.469	1.8	0.855	3.24	0.863
31	0.422	2.0	0.830	4.00	0.830
34	0.388	2.2	0.805	4.84	0.792
37	0.353	2.4	0.779	5.76	0.752
40	0.308	2.6	0.752	6.76	0.709
43	0.274	2.8	0.727	7.84	0.663
46	0.252	3.0	0.701	9.00	0.616
49	0.231	3.2	0.676	10.24	0.569
52	0.207	3.4	0.650	11.56	0.522
55	0.174	3.6	0.624	12.96	0.475
58	0.135	3.8	0.597	14.44	0.426
61	0.110	4.0	0.570	16.00	0.374
64	0.091	4.2	0.540	17.64	0.320
67	0.077	4.4	0.509	19.36	0.277
70	0.065	4.6	0.477	21.16	0.246
73	0.054	4.8	0.444	23.04	0.217
76	0.043	5.0	0.410	25.00	0.190
79	0.034	5.2	0.376	27.04	0.167
82	0.023	5.4	0.339	29.16	0.143
85	0.010	5.6	0.302	31.36	0.119
88	0.004	5.8	0.262	33.64	0.091
91	0.000	6.0	0.220	36.00	0.055

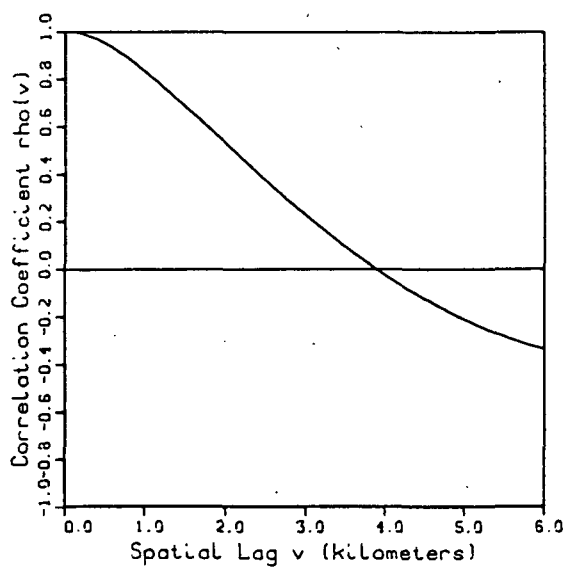
Walnut Gulch, Arizona

Ac=154.21 sq.km.

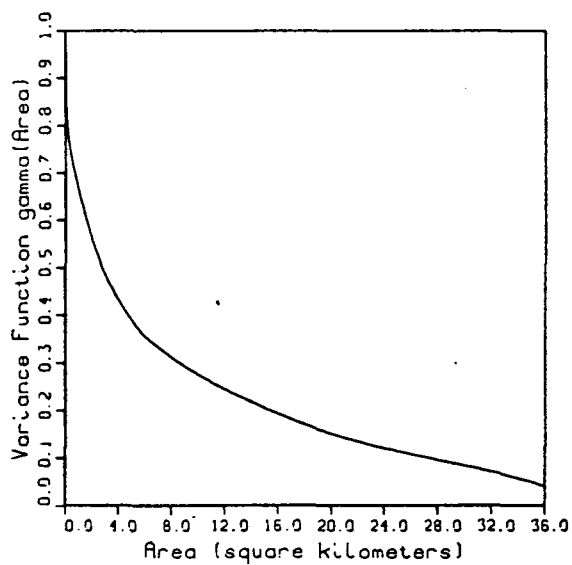
Storm Day
Sept 27, 1977



Spatial Correlation



Variance Function



Storm Day Sept 27 1977

Dry Fraction of Total Basin Area: $(A_{cd}/A_c)=0.012$

Wetted Fraction of Total Basin Area: $(A_{cw}/A_c)=0.988$

Expected Value of Point Depth (mm.): $E(Y) = 3.947$

Variance of Point Depth (mm. sq.): $Var(Y) = 10.067$

Coef. of Skewness of Point Depth: $S.C.(Y) = 1.795$

Spatial Distribution of Total Storm Depth y (mm.)		Spatial Correlation v (km.) rho (v)		Variance Function A (km.sq.) Gamma (A)	
	$A_{cw}/A_c (Y \geq y)$				
1	0.912	0.0	1.000	0.00	1.000
2	0.681	0.2	0.991	0.04	0.905
3	0.534	0.4	0.968	0.16	0.815
4	0.396	0.6	0.932	0.36	0.757
5	0.259	0.8	0.885	0.64	0.713
6	0.163	1.0	0.831	1.00	0.667
7	0.127	1.2	0.774	1.44	0.618
8	0.082	1.4	0.713	1.96	0.567
9	0.069	1.6	0.652	2.56	0.518
10	0.058	1.8	0.591	3.24	0.474
11	0.044	2.0	0.530	4.00	0.432
12	0.030	2.2	0.466	4.84	0.395
13	0.022	2.4	0.403	5.76	0.361
14	0.016	2.6	0.342	6.76	0.336
15	0.011	2.8	0.283	7.84	0.313
16	0.006	3.0	0.225	9.00	0.291
17	0.003	3.2	0.169	10.24	0.270
18	0.002	3.4	0.116	11.56	0.249
19	0.002	3.6	0.066	12.96	0.230
20	0.002	3.8	0.019	14.44	0.211
21	0.001	4.0	-0.028	16.00	0.192
22	0.001	4.2	-0.070	17.64	0.173
23	0.001	4.4	-0.108	19.36	0.155
24	0.000	4.6	-0.146	21.16	0.140
25	0.000	4.8	-0.182	23.04	0.125
26	0.000	5.0	-0.215	25.00	0.113
		5.2	-0.246	27.04	0.100
		5.4	-0.274	29.16	0.088
		5.6	-0.300	31.36	0.074
		5.8	-0.323	33.64	0.059
		6.0	-0.342	36.00	0.040